PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

HYDERABAD ASSIGNED DISTRICTS

FOR

1889-90.

WITH A REVIEW BY THE RESIDENT AT HYDERABAD.

Hyderabad:
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Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1889-90.

ERRATA.

II.

Paragraph 6 of the Commissioner's review.

In the fifth line, for the figure " Rs. 25,494," *read* " Rs. 25,095," and for the figure " Rs. ,09,454 " *read* " Rs. 1,09,055."

In the eighth line, for the figure " Rs. 6,855" *read* "Rs. 7,254."

In the sixth line, for " 60 " *read* " 59·9."

III.

Paragraph 83, page 17 of the report.

Under the heads " Charges " and " Surplus," for the figures " 1,76,150 " and " 2,64,391," respectively, against "1889-90," *read* " 1,76,549" and " 2,63,992."

IV.

Paragraph 84, page 17 of the report.

In the first line, for the figures " Rs. 25,494 " and " 41,304," respectively, *read* " Rs. 25,095 " and " Rs. 40,905."

In the second line, for the figure " Rs. 1,09,454 " *read* " Rs. 1,09,055."

In the third line, for the figure " 60 " *read* " 59·9 ".

V.

Paragraph 86, page 18 of the report.—Statement showing the expenditure of the year compared with that of the previous year.

In the columns headed " 1889-90 " and " Increase "—

For the figures "5,211 " and " 47 " against " B-III. Contingencies," *read* " 446 " respectively.

For the figures " 95,829 " and "1,644 " against " Total B. Establishm and " 2,043 " respectively.

For the figures " 1,76,150 " and " 11,299 " against " C " 1,76,549 " and " 11,698 " respectively.

VI.

Paragraph 87, page 18 of the rep

In the first line, for the figure " Rs. 6,855 " *read* " Rs. 7,254."

I.

Government of India review, paragraph 12.

1st statement—1889-90—For Charges Rs. 1,76,150, Surplus Rs. 2,64,391, and Proportion Rs. 60 respectively, *read* Rs. 1,76,549, 2,63,992, and 59·9.

Increase in 1889-90—For Charges Rs. 6,855, Surplus Rs. 2,54,943, and Proportion 1 respectively, *read* Rs. 7,254, 25,095, and ·9.

2nd statement—1889-90—For Rs. 1,19,411, 3,21,130, 56,739, 1,76,150, and 2,64,391 respectively, *read* Rs. 1,19,711, 3,20,830, 56,838, 1,76,549, and 2,63,992.

Increase in 1889-90—For Rs. 4,373, 27,976, 2,482, 6,855, and 25,494 respectively, *read* Rs. 4,673, 27,676, 2,581, 7,254, and 25,095.

Last clause—Line first—For Rs. 56,739 *read* 56,838.

VII.

Paragraph 88, page 18 of the report.

1889-90.—For Rs. 3,21,130 and 56,739 in two places respectively, *read* Rs. 3,20,830 and 56,838.

VIII.

Paragraph 89, *page* 19 *of the report.*

1st Statement.

1889-90—Expenditure—For Rs. 63,231, 70,156, 42,763, and 1,76,150 respectively, *read* Rs. 63,374, 70,315, 42,868, and 1,76,549.

1889-90—Surplus—For Rs. 1,003, 1,86,907, 76,481, and 2,64,391, respectively, *read* 860, 186,748, 76,384, and 2,63,992.

2nd Statement.

1889-90—Direction—Office—For Rs. 18,551 and 18,286 *read* 18,640 and 18,375.
Ellichpur—Office—For Rs. 16,519 and 16,516 *read* 16,609 and 16,606.
Total—For Rs. 76,045 and 16,516 *read* 76,135 and 16,606.
Amraoti—Office—For Rs. 5,080 and 5,064 *read* 5,115 and 5,099.
Total—For Rs. 11,295 and 5,064 *read* 11,330 and 5,099.
Akola—Office—For Rs. 2,793 and 2,793 *read* 2,838 and 2,838.
Total—For Rs. 13,606 and 2,793 *read* 13,651 and 2,838.
Buldana—Office—For Rs. 4,693 and 4,672 *read* 4,738 and 4,717.
Total—For Rs. 13,804 and 4,672 *read* 13,849 and 4,717.
Basim—Office—For Rs. 11,161 and 11,145, *read* 11,208 and 11,192.
Total—For Rs. 21,678 and 12,349 *read* 21,725 and 12,396.
Wun—Office—For Rs. 5,893 and 5,893 *read* 5,941 and 5,941.
Total—For Rs. 2,171 and 6,696 *read* 21,219 and 6,744.
Total—For Rs. 1,76,150 and 66,376 *read* 1,76,549 and 66,775.
Deduct deficit—For Rs. 66,376 *read* 66,775.
Net surplus—For Rs. 2,64,391 *read* 2,63,992.

No. 1362-G of 1890.

FROM

T. CHICHELE PLOWDEN, ESQ., C. S.,

Commissioner, Hyderabad Assigned Districts.

TO

THE SECRETARY FOR BERAR TO THE RESIDENT,

Hyderabad.

Dated Amraoti, 20th August 1890.

SIR,

I have the honor to submit the Forest Report of the Hyderabad Assigned Districts for the year 1889-90, which was received in my office in print on the 17th August.

2. The only changes of importance in forest areas are, first, the transfer of 534 square miles of grazing land in the Wun District from "Unreserved" to District Reserved Forests, and, secondly, a correction in the Basim District by which 157 square miles were added to the Unreserved Forests. The present distribution of classes of forest will be altered as soon as the Berar Forest Law, and the rules made under it, come into operation, and under the new classification there will be no room for the discrepancies referred to in paragraph 16. But there will always be a difference between the total figures in the Revenue Report and those in the Forest Report, because the Revenue Report includes statistics of forest lands in other than Government villages. It is only necessary, in order to prevent further confusion, to adopt in the Revenue Report an appropriate nomenclature for distinguishing such forest lands from those belonging to Government.

3. In respect to working-plans, I concur generally in the remarks at the end of paragraph 24. These plans can be prepared by the Conservator without the assistance of a specially trained officer; but owing to the nature of the forests which have to be dealt with, and the weakness of the local staff of subordinate officers, the collection of the requisite information cannot be rapidly accomplished. The further reorganization of the lower ranks of the forest staff, and the question of the aid to be given by officers of the revenue establishment in enforcing the rules in respect to grazing lands, will be taken up as soon as possible after the introduction of the new law.

4. The total number of forest offences was 381, a net decrease of 115 cases compared with the preceding year. The percentage of convictions is 83·, a sufficiently satisfactory result. But the variations in the different districts, and in the same district during the two years dealt with in Form 50, indicate that the prosecutions are not instituted upon any definite and consistent system. Thus in Akola the total number of cases has dropped from 55 to 26, and in Buldana from 144 to 70, and although it is true that the inhabitants of Berar are a docile, law-abiding people, it is extraordinary that there should have been only 17 cases of unauthorized grazing in the whole province. I don't want to harass the people with frequent prosecutions for petty offences, but it appears to me that there are signs of undue laxity in enforcing legitimate and necessary restrictions.

5. The results of the year's fire protection are excellent. Mr. Dansey writes, that "out of a total of 677,747 acres under protection, only 9,991 acres were burned, which is equivalent to the successful protection of 98·5 acres in every hundred acres attempted." In fact, with the exception of an unfortunate outbreak in the Gerumatergaon reserve in the Buldana District, by which 6,529 acres were burnt, there were no serious fires; in the Wun district only 1,710 acres

were burnt, compared with 10,955 acres in the preceding year, and with 21,700 acres in 1887-88. But in none of the fires suspected to be due to incendiarism was any offender detected or punished. The question of the liability of izaradars to render assistance in preparing fire lines, and in extinguishing fires will have my attention. The cost of protection was Rs. 7 per square mile, a rate which, for reasons explained by the Conservator, is slightly higher than that of last year; but assuming that the conditions are the same in both provinces, even the enhanced rate compares favorably with that of the adjoining administration, the Central Provinces.

6. The balance sheet of the year is the best on record for the Hyderabad Assigned Districts. Every year, for the last four years, the receipts show a steady increase, but in the year under report they have risen to Rs 4,40,541, compared with 4,08,192 in the preceding year, and the surplus of receipts over expenditure amounted to Rs. 25,494 in excess of that for 1888-89, and Rs. 1,09,454 in excess of that for 1886-87. The proportion of surplus to gross revenue was 60, against 58·6 in the previous year. The expenditure also shows an increase of Rs. 6,855, the chief item being due to increased percentages earned by village officials on account of forest revenue collected by them.

7. As to work done by officers, I have to thank Mr. Dansey for intelligent assistance promptly and cordially rendered in the many questions relating to forest administration dealt with during the year. One officer, Mr. Wittinbaker, has, I regret to say, given much trouble. His case is being separately dealt with.

I have the honour to be,

Sir,

Your most obedient Servant,

T. CHICHELE PLOWDEN,

Commissioner, Hyderabad Assigned Districts.

No. 48-C of 1890-91.

From

E. P. DANSEY, Esq.,

Offg. Conservator of Forests, Hyderabad Assigned Districts.

To

The COMMISSIONER,

Hyderabad Assigned Districts.

Dated via Amraoti, 1*st July* 1890.

Sir,

I have the honour to forward, for submission to the Resident, the Report on Forest Administration in the Hyderabad Assigned Districts for the year 1889-90.

I have the honour to be,

Sir,

Your most obedient Servant,

E. P. DANSEY,

Officiating Conservator of Forests,

Hyderabad Assigned Districts.

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PROGRESS REPORT OF FOREST ADMINISTRATION IN THE HYDERABAD ASSIGNED DISTRICTS FOR THE YEAR 1889-90.

INTRODUCTION.

Mr. E. P. Dansey, Officiating Conservator, had charge of the Circle throughout the year.

2. The Ellichpur Division continued in the charge of Mr. G. F. Prevost, Deputy Conservator.

3. The Amraoti Division was in charge of Mr. Rassul Khán, Sub-Assistant Conservator, up to the 7th December 1889, when he was relieved by Forest Ranger Bhukan (a passed Ranger of the Dehra Forest School) who continued in charge of the Division for the rest of the year.

4. The Basim Division remained in charge of Mr. G. F. Taylor, Officiating Deputy Conservator.

5. The Akola Division was managed, as an additional charge, by Mr. G. F. Taylor, Officiating Deputy Conservator, up to the 9th January 1890, when he was relieved by Mr. C. Haldane, on the appointment of the latter to be a Sub-Assistant Conservator in Berar. Mr. Haldane had charge of this Division for the rest of the year.

6. The Wun Division continued in the charge of Mr. Mansukh Rai, Sub-Assistant Conservator, who was, however, absent on privilege leave between the 26th September and the 10th October 1889, when the Deputy Commissioner of Wun assumed charge of the Office.

7. The Buldana Division was, throughout the year, in charge of Mr. G. H. Wittinbaker, Probationary Sub-Assistant Conservator.

8. The proposals submitted to Government by the Chikalda Forest Committee in 1887 were not finally abandoned until towards the close of the year, so that there is no prospect of the Berar Forest Law coming into force before the 1st October 1890.

9. The year under review was a successful one. Both the gross and the net revenues were the highest on record for the Circle, and the results of fire protection continued to be very good.

CHAPTER 1.—Area and Boundaries.

1.—*Area.*

10. The Berar Forest Law not having come into force, the old order of classification is adhered to. This classification is founded on the Forest Rules promulgated in Government of India Notification (Department of Agriculture, Revenue and Commerce) No 520, dated 25th October 1871, which for the present make Government of India Circular No. 4-F, dated the 23rd April 1887, inapplicable to this Province.

11. Referring to what was said in the Report of last year on the subject of the destructive practice declared to be prevalent in one or two Districts of people taking up unreserved lands on the mere pretence of cultivating them, and moving off after having denuded such tracts of all saleable material, it is satisfactory to

be able to note that the extensive additions about to be effected, under the new Forest Law, in the area of permanent forest estates, added to certain protective provisions introduced into the Rules for the management of such estates as are not intended to be permanent, will effectually remedy this state of things.

12. In last year's Report it was explained that the circumstances of the Province forbid us to hope that the present area of the timber Reserves can be increased to any great extent. Thus no additions were made to this kind of forest during the year. But proposals were submitted to Government which, if approved, should have the result of enlarging the existing area by over 100 square miles in the ensuing year.

13. The following table shows the changes effected during the year in the area of the lands under the management of the Forest Department:—

Classes of Forest.	Area in square miles.				Percentage of Forest area to area of Province.
	Area on 1st April 1889.	Added during the year.	Excluded or transferred to other classes.	Area on 31st March 1890.	
Demarcated State Forest ..	1,059	...	...	1,059	6
District Reserved Forest ...	478	534	...	1,012	5·7
District Unreserved Forest ...	2,614	175	546	2,243	12·7
Total ...	4,151	709	546	4,314	24·4

14. The area of the *Demarcated State Forests* remained practically the same as last year.

15. The area of the *District Reserved Forests* given in previous years has been incorrect. The Grazing Lands of the Wun District should not have been included under Unreserved Forests. This mistake has now been rectified, and the 534 square miles of Wun Grazing Lands have been placed in the category of District Reserves.

16. *The Unreserved Forests* were reduced by 546 square miles, which area is made up as follows:—

(*a*) Grazing Lands transferred to District Reserves ... 534 square miles.
(*b*) Waste land taken up for cultivation in Wun ... 12 „ „

Total ... 546 square miles.

The additions comprised:—

(*a*) Correction of area in Basim ... 157 square miles.
(*b*) Cultivation thrown up in Basim and Buldana ... 18 „ „

Total ... 175 square miles.

It was explained in the Report of the previous year that the figures given for the Unreserved Forests are not reliable. The record should comprise all Government waste not included in State-Forests, District Reserved Forests, and lands set aside for village purposes. The District Forest and Revenue Reports have hitherto shown marked discrepancies with regard to the correct area of these areas—discrepancies which have owed their origin, in the majority of cases, to misconceptions as to the true meaning of Unreserved Forest. Thus some District Forest Officers had hitherto omitted the "Free-Grazing-Numbers" from this class of forest, while other lands had been included by them which had no business to be included. This prevailing uncertainty in regard to the scope of departmental management has had the natural result of making frequent corrections of area necessary.

2.—*Boundaries.*

17. In its Resolution on last year's Report, the Government of India observes that it has not been clearly explained if all the Demarcated State-Forests are properly demarcated, or if their boundaries have still to be laid down. In this connection, it has to be remarked that it follows from the ryotwari system of settlement in force, and the division of the Province into field numbers, themselves demarcated by "warlis," or mounds of earth and stones, that any tract of land which may be constituted a State-Forest, or a District Reserved Forest, is practically demarcated at the outset; because it but rarely happens that fractions of survey numbers are taken up on these occasions. All the lands under the management of the Department, not excepting the so-called Unreserved Forests, are consequently demarcated. The boundaries of the Demarcated State-Forests have been further improved by means of cut lines which extend from warli to warli, and serve as exterior fire-lines, while the warlis themselves have been supplemented by wooden posts imbedded in mounds of loose stone. The Melghat Taluk was never divided into survey numbers; but the Bairagarh, Gugamal and Chikalda State-Forests, situated in that region, are all efficiently demarcated as above.

The warlis which serve to mark off the District Reserved and Unreserved Forests are repaired from time to time according as they require attention. No better system of demarcation seems called for in the case of lands which are not intended for permanent reservation, or which are intended principally for purposes of pasture.

18. During the year under review the new State-Forests of Medsi and Chandus (in Basim) were demarcated on the system explained for this class of forest, and in all Districts the existing boundaries of Demarcated State-Forests were kept in order. The work of repairing the warlis of the District Reserved Forests in Amraoti was brought to a completion, while petty repairs in the same connection were executed in the other Districts.

CHAPTER II.—Surveys, Working-Plans and Annual Plans of Operations.

1.—*Surveys.*

19. The following extract from the Progress Report of the Superintendent of Forest Surveys for the survey year ending 1st October 1889, deals with the work executed in the Forest Survey Branch:—

Melghat area surveyed.

"In the Melghat a small area of 8 square miles, which had inadvertently been omitted the previous year, was surveyed partly on the 4″ and partly on the 2″ scales.

Western boundary of the Melghat pending settlement.

* "It is desirable that attention should be called to the boundary question brought forward in paragraph 14 of last year's annual progress report, as the western boundary of the Melghat is still an open question, the settlement of which has delayed the publication of the Melghat maps which contain this boundary.

"An expenditure of Rs. 5,206 was incurred during the financial year 1888-89 and adjusted in the Berar suspense accounts in that year. The expenditure was chiefly on account of completing field work in the Melghat; map-drawing and payments made to the Survey of India Department on account of printing and publishing maps (see appendix D).

"A further sum of Rs. 4,679 was expended since the close of the financial year; chiefly due to payments made to the Survey of India Department on account of publishing maps, &c., and to a vast amount of map drawing and heavy work in deducing field areas as well as other miscellaneous work."

* This question has since been disposed of, *vide* Government of India's letter No. 390-I, dated 1st February 1890. The maps will now be published without delay.

20. The map sheets of the Melghat Survey have in great part not been published. This is unfortunate, having in view that the preparation of a Work-

ing-Plan for the State-Forests of that region has had to be commenced without the facilities which the Survey promised to afford.

2.—*Working-Plans.*

21. The Raipur-Makla Working-Plan, regarding which a reference had to be made to Government, was cancelled during the year.

22. It is proposed to replace the cancelled Working-Plan by one which shall embrace the entire area of the Bairagarh and Gugamal Reserves. The outline of this project, drawn up by the Conservator after a long and careful examination of these forests, has already been submitted for the opinion of the Inspector General of Forests, in conformity with the prescribed procedure in that connection; and it is probable that these important Reserves—of which the combined area exceeds 500 square miles—will all be under systematic management from the 1st November 1891.

23. Practically speaking, the above are the only forests of their class in a position to supply the market with timber just now, and this state of things must continue for many years to come. Of the 25 other Demarcated State-Forests, two (Borgaon and Ekburji) are Rumnas, and it is questionable if two others (Chirodi and Mehdari) ought not to be classed in the same category.

The Chikalda Reserve has for one of its main objects the preservation of the ornamental woodlands in the vicinity of the Station, and the security of the neighbouring slopes from landslips: it comprises no valuable timber tracts. The Gahuli Reserve (Basim) should, in the Conservator's opinion, never have been made a Demarcated State-Forest at all, and it is proposed to surrender it for purposes of pasture.

There thus remain 19 forests—all in South-Berar—with an aggregate area of 413 square miles, which, from a timber point of view, possess in general only a prospective value, and in respect to which any Working-Plans which we may prepare will have to be mainly directed to works of re-stocking and protection.

24. The preparation of Working-Plans for these remaining forests should, therefore, be no difficult undertaking, once the required information has been obtained. In this last connection, however, it is necessary to enter into particulars. These Reserves are, for the most part, built up of three distinct types of forest, namely:—

(*a.*) Abandoned cultivation that is either blank, or insufficiently stocked with tree-growth.

(*b.*) Arid tracts—mostly rocky and hilly—containing a thinly distributed stock of under-grown trees, in which the useless Salai (Boswelia thurifera) is often preponderant.

(*c.*) Tracts fairly well stocked with Teak poles and saplings of inferior quality, and of coppice origin, associated with Anogeissus latifolia, Terminalia tomentosa, Lagerstrœmia parviflora, Ougenia Dalbergioides, Bassia latifolia, Buchanania latifolia, Phyllanthus emblica, Acacia Catechu, &c., themselves, for the most part, saplings and poles of coppice origin.

It may be accepted that the first two types comprise not less than four-fifths of the area of the South-Berar Reserves.

A rough subdivision of each forest according to the prevalence of certain predominant types is consequently the first thing to be thought of. Because it is here essential to possess a correct idea of the areas to be restocked; and since each type of forest suggests a totally different form of treatment, it is evident that we can arrange nothing definite without possessing an approximate knowledge of the extent and

circumstances of each type. Not only must each forest be subdivided as above, but the divisions will have to be surveyed and entered upon the existing revenue maps, and these it will be necessary to enlarge for the purpose.

Instructions have issued to prosecute this preliminary work with all despatch, and it is hoped that by the rainy season of 1891 the Conservator will be in a position to submit proposals for a number of the above forests.

At this stage it ought, however, to be explained that the time of the District Forest Officers is more fully occupied than the Government of India would seem to suppose. The Divisional Forest Officer in Berar has not only the Demarcated State Forests to look after, but the District Reserved Forests and the Unreserved Forests as well, from which indeed the bulk of the forest revenues is derived. Thus the Wun Officer has 863 square miles of ground to go over, the Basim Officer 768, and the others in proportion. The forests do not occur concentrated in large blocks as in other more fortunate Provinces, but in isolated patches that lie scattered all over the District—a circumstance which involves, of course, loss of time in marching to and fro. Further, the Officers in charge of Divisions are, most of them, Sub-Assistant Conservators of limited training, education, and experience.

As the Government of India correctly observes, the work of framing these Plans can be done by the Conservator from information to be supplied by the local officers, but for the reasons given above the collection of this information is likely to require time: it is out of the question that any special assistance can be provided from an Establishment that is already too weak for the routine work of the Department.

3.—*Annual Plans of Operations.*

25. The whole of the year's forest work was on the basis of Annual Plans of Operations prepared by the Divisional Officers in consultation with the Deputy Commissioners, and approved by the Conservator.

CHAPTER III.—Protection and Improvement.

1.—*Establishment.*

26. The additional Sub-Assistant Conservatorship sanctioned for the Circle, and to which allusion was made in last year's Report, was filled up in the person of Mr. C. Haldane, who was appointed to the charge of the Akola Division.

27. Proposals have been submitted to Government for the appointment of a 6th Sub-Assistant Conservatorship, and for the permanent entertainment in Berar of two trained officers of the superior staff, instead of only one as hitherto. With five Sub-Assistants (the Tahsildar of the Melghat can hardly count as such), and two trained Assistants or Deputy Conservators, the Circle will be permanently provided for in the upper ranks of the Establishment.

28. The Subordinate staff is below the necessary strength. The Deputy Commissioners complain, in this connection, of the increased work thrown on the Tahsil offices, and of the inability of the one Taluk Forester, unassisted in this by as much as a single Forest Guard, to look after the whole of the District Reserved Forests and Unreserved Forests of the Taluk. At the same time, it is desirable, as remarked in last year's Report, to await the introduction of the new Forest Law, and the redistribution of the forest area under it, before submitting proposals for a permanent increase in the Subordinate Establishment of the Circle.

2.—*General Protection and Breaches of the Forest Law.*

29. Breaches of the law in reference to the Demarcated State Forests are not of common occurrence; but it is otherwise with the District Reserved and Unreserved Forests. This is intelligible by the remarks made in the preceding paragraph, from which it will be understood that the number of cases recorded for the District Reserved and Unreserved Forests does not furnish a correct idea of the protection actually afforded to those areas, or of the efficiency of the check imposed on unlicensed cattle-grazing in the constituted pasture grounds of the Province. It is a general complaint with the District Forest Officers that the village officials are not active in preventing the commission of forest offences within the limits of their respective charges, and that in this way the care of the District Reserved and Unreserved Forests is practically abandoned to the solitary Taluk Forester on his rounds, and to the District Forest Officer, with the result that can be imagined.

Even when the new Forest Law does come into force, it is out of the question that Government can, in the Forest Department, provide an Establishment of sufficient strength to supervise, unaided, the immense area of Grazing-Lands —Reserves on which the people will be dependent not only for pasture, but to a considerable extent also for their supplies of firewood and small timber. It is thus absolutely necessary that the forest staff should have the support of the Village Officers, and of the Police, and that these should be made both to understand and to feel the nature of their responsibility.

30. The following statement gives the classification of forest offences during the year:—

Particulars of cases.	Number.		Increase	Decrease
	1888-89.	1889-90.	In 1889-90.	
1. Injury to the forests by fire	6	9	3	...
2. Unauthorized felling or appropriation of wood and other minor produce...	337	308	...	29
3. Grazing without permission	19	17	...	2
4. Other offences	134	47	...	87
Total ...	496	381	3	118

31. The annual statement* showing the results of prosecutions for the year is not in the revised Form. The latter was prescribed too late in the year to render this possible, and it has further to be observed that there is as yet no authority for compounding forest offences in this Circle.

* Form No. 50.

32. There were 77 new cases of forest offences in the Demarcated State-Forests, as compared with 47 in the previous year; and 304 new cases in the District Reserved and Unreserved Forests, as compared with 449 in the previous year. This shows a total decrease in the number of new cases for the year amounting to 23 per cent.

The percentage of convictions remained at about the same high standard, namely 83, as compared with 84 in the previous year.

33. The decreases occurred in Buldana, Akola, and Ellichpur. In the two former the number of new cases was only half that of the previous year. The only increase of importance took place in Wun.

34. In Buldana a decrease was to have been expected as a natural sequence to Mr. Rassul Khán's lax control in 1887-88, and the abnormal increase in forest offences which this gave rise to in the following year.

The following statement compares the situation in Buldana during the past five years :—

Year.		Number of cases.	Percentage of
1885-86...	...	62	70
1886-87...	...	50	78
1887-88...	...	28	53
1888-89...	...	144	90
1889-90...	...	70	77

Mr. Wittinbaker has, however, no good explanation to offer of the much less satisfactory results of his prosecutions during the year under review.

35. In Akola the cases decreased from 55 to 26, but the percentage of convictions continued to be very high, namely, 88.

36. In Ellichpur the prosecutions for offences in the District Reserved and Unreserved Forests decreased by 50 per cent., while those connected with the Demarcated State-Forests increased five-fold. Mr. Prevost attributes the above decrease to the effect of an order of his warning all subordinates not to prosecute for trivial offences against the law. This explanation is so far unsatisfactory that it would seem to indicate a reprehensible degree of zeal in the previous year. The increase in the number of cases relating to the Demarcated State-Forests is intelligible by the recent opening out of parts of the Bairagarh Reserve to Improvement-Fellings, and the inducements which these operations offer for petty frauds in connection with the export of the material.

37. The only important increase in prosecutions took place in Wun, where there were 68 new cases, against 43 in the previous year, and 29 in the year before that. This progressive increase is attributed by the Divisional Officer to the steady disappearance of the waste lands under the plough, in which surmise he is probably correct. It is satisfactory to perceive that the percentage of convictions in this District rose during the year from 74 to 84.

38. In Basim there was an increase in the cases relating to Demarcated State-Forests, due to the recent creation of other forests of that class.

39. The situation in Amraoti remained much the same, the number of new cases being 37, against 34 in the previous year, and the percentage of convictions 76, as compared with 73 in 1888-89. It is hoped that with Mr. Rassul Khán's removal from the charge of this Division, the District Reserved Forests will be more efficiently guarded. The Conservator satisfied himself, on his tour, that there was in this respect much room for improvement.

40. The protection of the District Reserved and Unreserved Forests is nowhere what it ought to be, and attention is invited in this connection to the remarks made in paragraph 29.

3.—*Forest fires.*

41. The results of the year's fire protection are given below:—

Division.	Year.	Area attempted.	Results. Successfully protected.	Results. Failures.	Approximate cost per square mile of area attempted.
		Acres.	Acres.		Rs. a.
Ellichpur	1889	387,093	386,606	487	4 8
	1890	389,493	389,493	...	4 11
Amraoti	1889	12,175	12,165	10	14 10
	1890	12,198	12,198	...	16 12
Akola	1889	32,946	32,946	...	14 5
	1890	32,946	32,942	4	15 0
Buldana	1889	59,664	59,607	57	1 15
	1890	59,664	53,135	6,529	2 13
Basim	1889	86,700	86,057	643	8 3
	1890	86,701	84,953	1,748	7 7
Wun	1889	96,745	85,790	10,955	12 6
	1890	96,745	95,035	1,710	14 9
Total ...	1889	675,323	663,171	12,152	6 9
	1890	677,747	667,756	9,991	7 0
Difference in favour or against the year ...		+ 2,424	+ 4,585	—2,161	+ 0 7

42. A mistake was committed in last year's Report in reference to the "attempted" area in Amraoti, which was erroneously made to include the Amraoti Rumna, or Grass-Reserve. This error has been rectified in the present statements.

43. The small increase in the area "attempted" is due to the inclusion of the Chikalda Reserve, of which the protection had, for alleged sanitary reasons connected with the Station of Chikalda, been abandoned some years previously.

44. Although the season was a very dry one, the results of fire conservancy operations were, on the whole, excellent; in fact the best on record for this Circle. Out of a total area of 677,747 acres under protection, only 9,991 acres were burnt, which is equivalent to the successful protection of 98·5 acres in every hundred acres attempted. It would be difficult to do better than this; and, having in mind that the open savannah-like character of the Berar forests renders them peculiarly liable to destructive conflagrations, the results obtained are, in the Conservator's opinion, very gratifying, reflecting, as they do, much credit on the Forest Establishment, but still more so on the Berar ryots, than whom, taken as a whole, it would be difficult to find a more law-abiding people.

45. It is in fact mortifying to have to state that nearly all the fires which occurred during the year were caused by the Forest Establishment in the course of those defensive measures without which there can be no protection at all. The operation of line-burning in Berar is, from that open savannah-like character of the forests to which allusion has been previously made, and the universal dryness of both soil and climate, a difficult undertaking, and occasional accidents are bound to happen. Notwithstanding, the conflagrations in Buldana, although originating in this way, showed bad management on the part of the Divisional Officer, Mr. Wittinbaker, and, what is worse, a lamentable want of zeal.

46. It is gratifying to notice the improvement that has taken place in Wun, where only 1,710 acres were burnt, against 10,955 in the previous year, and 21,700 in the year before that. Of the area burnt, 580 acres were the result of accidents in line-burning. In this connection the Divisional Officer refers in forcible language to the refusal of the Izara villages located in the vicinity of the Gondwakri Reserve to supply labour either for preparing the fire-lines, or for extinguishing such fires as occurred. All villages in the locality being Izara, the Divisional Officer had to obtain labour from a great distance, the result being delay in burning the lines, increasing danger of accidents, and a considerable augmentation of cost. Rules have been drafted under the new Law which will have the effect of defining the obligations of the people in reference to the fire-protection of the State-Forests; but it is to the personal influence of the Deputy Commissioners that we must look for the removal of mere obstruction. Of the remaining area burnt in the Wun District, 1,100 acres are ascribed to incendiarism: nobody appears to have been apprehended.

47. Of the fires that occurred in the Basim District, and these were practically confined to the Ponganga, Rui and Mohoja Reserves, the larger area was burnt by incendiaries, all of whom escaped detection.

48. The cost of protection was Rs. 7 per square mile, against Rs. 6-9-0 in the previous year. The opening of the Melghat Reserves by additional roads must add to the cost of protection, while it at the same time strengthens, by the presence of a sufficiency of interior fire-lines, the general system of defence in that region. The dryness of the season in South-Berar during the past two years has made it necessary to commence protection earlier than usual, and the cost of the operations has consequently risen. But at the same time the Amraoti, Akola and Wun Divisions incur too heavy an expenditure under this head, and endeavours will be made to reduce it. It must, however, not be lost sight of that where the forest area is, as in those Districts, split up into numerous isolated blocks, the cost of protection is bound to be heavy in proportion.

4.—*Grazing and Fencing.*

49. *Grazing in the Demarcated State-Forests* was put a stop to every where except in the State-Forests of Buldana. The ill-considered encouragement given in past years to cultivation in the last named District has absorbed the waste-lands to the extent of making the cattle in some degree dependent on the only two timber Reserves which exist in that part of the Province, and it is feared that, notwithstanding the deteriorated condition of these forests, there will be no option but to either reduce their area (which is already too small for the requirements of the District,) or to work them on a Plan which will provide for the entire area being closed at least periodically, and by alternate blocks.

Under the new Law, the present South-Akola "Coppice Reserves,"* with an area of some 64 square miles, will in all probability become similarly situated; and it may prove interesting in this connection to know what the Conservator's opinion is in regard to the future of these remnants of the old Balaghat Forest, which further comprise the existing State-Forests of Ghatbori, Mandwa, Rui, Medsi, and Chandus. Appendix B gives the Conservator's views on the subject. Until the forest areas have been finally settled under the new Law, nothing definite can be arranged in furtherance of the suggestions contained in that Memorandum.

* Now included in the District Reserved Forests, and heavily grazed over.

50. The subject of grazing in the other classes of forest lands comes more appropriately under "yield and working." Indeed the bulk of these forests form the recognized pasture-grounds of the Province, and will constitute the C. State-Forests, or Grazing Reserves, under the new Berar Forest Law.

5.—*Natural Reproduction.*

51. This subject was treated so exhaustively in last year's Report that it should be unnecessary to refer at any length to it here. The Conservator must, however, observe that, as a result of his three months' tour in South Berar, when he had occasion to visit for the first time the Basim, Akola, and the South-Wun Reserves, he has come to entertain a more favourable opinion of the forests of that region. Some of the Reserves, such as Kinwat and South-Anjankheir, really show a promising state of things for the future; and, elsewhere, conditions are so far favourable that instances of the successful reproduction of Teak are not wanting, provided that there exists a sufficiency of shelter, and that fertile seed-bearing trees of the species occur in sufficient numbers. Unfortunately, of course, these subservient conditions are not as common as one could wish. But where their fostering effects are felt, Teak seedlings of from 1 to 5 years of age are not unfrequently met with. In otherwise very denuded localities the cover of isolated Zizyphus bushes seemed, in fact, to provide all the necessary guarantees for successful vegetation, when once germination had taken place.

The reproduction of Terminalia, Ougenia, Buchanania, Acacia and other inferior species was, in most of these forests, sufficiently good, and the Wun forests owe their backward condition, in the Conservator's opinion, a good deal to inefficient fire-protection in the past. It is a pity that the Kinwat Reserve should be so unfortunately situated as regards the market, because in another 30 years the greater portion of it will have become transformed into a very dense and otherwise valuable timber forest—a notable instance of the effects of protection from cattle and fires.* Teak is not sufficiently numerous; but the young saplings of that species are remarkable for the lance-like straightness of their stems, and their generally healthy appearance—so very different from the diseased vegetation of the Melghat. On the whole, the Conservator thinks that there is no cause for discouragement in respect to at least the Wun and Basim forests, and that the difficulty of restocking artificially such portions of these Reserves *as are fit to grow useful timber* will not prove insurmountable, provided always that cattle and fires are systematically and efficiently excluded.

* "Light grazing" was never much practised in this forest, owing to the large extent of open forest situated outside, and the prevalence of predaceous flies, and numerous tigers.

6.—*Artificial Reproduction and Cultural Operations.*

52. The detail of these works is shown in Form No 52.

53. The old Melghat Teak plantations have been written off the register. The reasons for this are explained in paragraph 52 of last year's Report. The general want of success which attended the cultural operations of previous years, and to which reference was made in paragraph 53 of the Report for 1888-89, has led to the greater part of these also being struck off the list; and with small exceptions in the case of Akola, Basim, and Wun, the present review only deals with operations undertaken in the course of the year.

54. In Akola the cultural operations of previous years largely consisted of Babul sowings in the Babul-Bans of Loni and Bhongaon, and these are understood to have been fairly successful, notwithstanding that much injury is said to have been caused by rats, and by the grub of the Longicorne beetle. Small additions were made to these works during the year.

55. In Basim, with the exception of the works undertaken in the current and the previous year, the whole of the cultural operations are reported failures, and it is most probable that the former will fail too; because the plan has been here again followed of sowing Teak seed in the open; on ploughed land, it is true, but still in unsheltered localities. Fortunately, only a small area of 39 acres was thus operated on during the year.

56. In Wun again, only the 400 acres of ploughed land sown with Babul and Khair in the previous year are favourably alluded to, and it is too soon to predict the success of even this much. Nothing new was undertaken during 1889-90.

57. In Ellichpur and Buldana the whole of the previous cultural operations are reported to be failures. In the present year, 320 acres of ploughed land were sown with Teak, Tiwas, Haldu, Dhoura, and Bamboo in Ellichpur, and 115 acres with Babul, Sajar, Neem, Dhaura, &c., in Buldana. It is too early to report on the results of these operations.

58. Only such cultural operations were performed during the year as had already been commenced in the previous year, the Conservator having issued orders to cease a series of experiments which seemed to him to have proceeded far enough, and to have sufficiently shown the futility, in the peculiar conditions of soil and climate prevailing in the Berar forests, of endeavouring, by means of broadcast sowing (whether the soil has been previously loosened for the purpose or not), to re-stock exposed surfaces with Teak and the more useful timber species. After carefully examining the South-Berar Reserves, the Conservator is of opinion that the following points ought to receive careful attention in all future attempts at propagating Teak artificially in the forests of this Circle :—

(*a*)—That we should take advantage of such nurses—in the form of Acacias, Zizyphus, &c.—as Nature has provided, and only attempt to re-stock under conditions which will afford continuous shelter to the young plants in the dry months of the year ;. for which purpose we should, in the case of areas devoid of such aids to reproduction, commence by creating them. This is the course which Nature is herself following in the Berar forests; and in the peculiar circumstances that we have to deal with, it is doubtless the best.

(*b*)—That we should avoid plantations and all operations (such as broadcast sowing) involving the accumulation of the seed, or the concentration of the plants. The opposite course is likely to be followed in Berar by invasions of rats, and of predaceous insects and animals; in the same way that a granary full of wheat, or a young corn-field, are subjected to similar risks. The rats alone are such a plague in Berar that we are bound to take them into very serious consideration.

(*c*)—That we should use seed imported from Burma, or any other Province in which the vegetation of the species is healthy and normal. It is almost certain that the seed obtained in Berar—in the case of Teak anyhow—is in great part unsound. Having regard to the fact that the entire Province can hardly be said to contain one sound, mature, normally developed Teak tree, this should be no matter for surprise. Doubtless, the circumstance has had a more important bearing than is generally supposed on the question of natural reproduction in the Berar forests.

7.—*Experiments and Exotic Trees.*

59. The two Date plantations at Ellichpur are reported to be doing well.

8.—*Communications, Buildings, Wells, &c.*

60. Appendices C and D show in detail the works executed under this head in the Ellichpur Division; both those executed in the Forest Department and those executed in the Public Works Department.

The corresponding works for the rest of the Circle are not sufficiently important to find a place in these Appendices.

61. In the Melghat, 24 miles of road were completed by departmental agency. The Raipur-Jarida road was finished, as also a new road from Chowrakhund to Buttram (12 miles). The total cost was Rs. 10,801, or Rs. 450 per mile.

Repairs were executed to 169 miles of road, at the moderate cost of Rs. 11-8-0 per mile. The Conservator went over the whole of these roads, new and old, and can testify to their being well constructed and looked after.

62. The road-work executed by the Department outside the Ellichpur Division was confined to petty repairs.

63. In the Public Works Department the Gugamal Forest Road was completed to a distance of 22 miles (from Akot to Asalwara), while the remaining 16 miles (from Asalwara to Selu) were under construction. No information has been furnished of the expenditure incurred.

64. It was remarked in last year's Report that a larger capital has perhaps already been sunk in the Melghat forests, in the shape of roads, than is warranted by their present value.

These words were intended to refer more especially to the expensive metalled roads executed in the Public Works Department, and the object of the remark was merely to accentuate the extravagance of supplementing the existing outlets to the plains by facilities* which could but add largely to the expenditure already incurred in that connection.

*Portable Tramways.

It was not for a moment intended to imply that the *number and extent* of the existing roads is more than departmental requirements demand. On the contrary, it will be necessary, and profitable as well, to add considerably to the mileage of roads inside the Bairagarh and Gugamal Reserves.

But while the extent of the existing communications is insufficient, it seems incontrovertible that their cost has been very excessive, if the question be regarded from a purely departmental point of view; by which is meant that less elaborate work than that executed in the Public Works Department would have sufficed for the requirements of the Melghat forests, in the same way that it has sufficed for more important forests, not less difficult of access, in other parts of the Empire.

Thus the 48 miles of road constructed by the Forest Department in the Bairagarh Reserve during the past two years have only cost Rs. 21,249, while the Ellichpur-Pili metalled road, with a length of some 35 miles only, has cost close on four lakhs of Rupees; and the Gugamal Forest road, with a length of 38 miles, promises to cost quite as much.

The proper light in which to regard the whole question is doubtless to consider the construction of the above and similar roads in the Public Works Department as having been dictated by more important considerations than the mere opening out of the Melghat State-Forests.

65. Among buildings we have to notice the completion during the year of two rest-houses in the Bairagarh Reserve; one at Raipur and the other at Jarida at a total cost of Rs. 3,100. No important works were executed under this head in the other Divisions.

66. Four pukka wells were constructed in the Melghat Reserves (at Raipur, Kolkaz, Dakna, and Rangrao-Churni), the total cost being Rs. 961; and within the whole Melghat area 14 wells were repaired and cleaned out, at a total cost of Rs. 30.

CHAPTER IV.—Yield and Working.

1.—*Removal of Produce by Government Agency.*

67. The full particulars of the outturn are given in Forms 54 and 55.

68. Except in Ellichpur, the outturn from the District Reserved Forests is not kept distinct from that of the Unreserved Forests. The reasons for this have been given in last year's Report, and need not be further referred to—the less so that with the reclassification of the forests under the new Berar Forest Law the evil will disappear.

69. The figures of the out-turn in quantity of material from this source (District Reserved and Unreserved Forests) are not to be depended upon. Apart from the fact that they have, in great part, been derived from the accounts of ignorant village officials, whence the information has drifted to the District Forest Office through the Tahsilis, where the establishment is not sufficient to be able to attend properly to the requirements of the Department, much of the revenue corresponding has been realised from the local auction sales of produce—fallen or dead trees; or occasionally the whole contents of a Babul-Ban—which is not measured up at the time, and in respect to which the quantity of material is arrived at later on by processes of which the less said the better. If it be borne in mind that nearly every acre of unreserved government waste in the Province is "Unreserved Forest," the above state of things will be accepted as being in a great measure inevitable.

70. Even as regards the Demarcated State-Forests the volume recorded for the out-turn is the result of very crude calculations. This again is a necessary evil in Berar, where the available timber is small and inferior, and has consequently to be rated by the cartload, kharassload, bullockload, &c.

71. Again, much produce is exported from the Berar Forests under cover of local concessions. The quantity of timber and firewood removed in this way from the Unreserved Forests is not susceptible of either measurement or valuation.

72. The Demarcated State-Forests cannot be expected, in their present deteriorated condition, to assist much in supplying the market; and such fellings as take place within this class of forest are minor operations directed to the improvement of the crop—the cutting back, for instance, of misshapen and diseased Teak, with the view to producing, by the agency of coppice, a more normal growth of that species; and the extraction of dead material. In the Melghat forests alone do we meet with a somewhat better state of things.

73. Subject to the preceding explanations and remarks, the following three statements compare the out-turn of timber, fuel and bamboos for the present and the previous year :—

1.—*Timber.*

Division or District.	Demarcated State-Forests.		District Reserved and Unreserved Forests.		Difference in favour of, or against the year.	
	1889-90.	1888-89.	1889-90.	1888-89.	Demarcated State-Forests.	District Reserved and Unreserved Forests.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Ellichpur ...	36,989	26,796	378,744 (Rs. 85,758)	339,561 (Rs. 75,531)	+ 10,193	+ 39,183 (Rs. + 10,227)
Amraoti ...	20	...	313 (Rs. 79)	Farmed (Rs. 129)	+ 20	+ 313 (Rs. —50)
Akola ...	42	406	5,550 (Rs. 783)	550 (Rs. 86)	— 364	+ 5,000 (Rs. + 697)
Buldana ..	252	716	90,239 (Rs. 13,296)	77,412 (Rs. 11,235)	— 464	+ 12,827 (Rs. + 2,061)
Basim ...	117	12	72,001 (Rs. 11,280)	55,358 (Rs. 8,090)	+ 105	+ 16,643 (Rs. + 3,190)
Wun ...	230	400	2,844 (Rs. 599)	945 (Rs. 304)	— 170	+ 1,899 (Rs. + 295)
Total ..	37,650	28,330	5,49,691 (Rs. 1,11,795)	4,73,826 (Rs. 95,375)	+ 9,320	+ 75,865 (Rs. + 16,420)

2.—*Fuel.*

Division or District.	Demarcated State Forests.		District Reserved and Unreserved Forests.		Difference in favour of, or against the year.	
	1889-90.	1888-89.	1889-90.	1888-89.	Demarcated State-Forests.	District Reserved and Unreserved Forests.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Ellichpur ...	385	...	261,285 (Rs. 8,820)	268,345 (Rs. 7,226)	+ 385	— 7,060 Rs. + 1,594
Amraoti ...	3,125	1,072	87,858 (Rs. 17,182)	76,503 (Rs. 14,540)	+ 2,053	+ 11,355 Rs. + 2,642
Akola ...	94,259	80,308	391,888 (Rs. 15,031)	185,809 (Rs. 7,089)	+ 13,951	+ 206,079 Rs. + 7,942
Buldana ...	18,323	11,115	62,588 (Rs. 1,698)	53,680 (Rs. 1,433)	+ 7,208	+ 8,908 Rs. + 260
Basim ...	205	3,766	117,155 (Rs. 2,425)	89,847 (Rs. 2,229)	— 3,561	+ 27,308 Rs. + 196
Wun ...	700	10,528	89,077 (Rs. 2,139)	11,588 (Rs. 377)	— 9,828	+ 77,489 Rs. + 1,762
Total ...	116,997	106,789	1,009,851 (Rs. 47,290)	685,772 (Rs. 32,894)	+ 10,208	+ 324,079 Rs. + 14,396

3.—*Bamboos.*

District or Division.	1889-90.						Difference in favour of, or against the year.		
	Demarcated State-Forests.	District Reserved and Unreserved Forests.	Total.	Demarcated State Forests.	District Reserved and Unreserved Forests.	Total.	Demarcated State Forests.	District Reserved and Unreserved Forests.	Total.
	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
Ellichpur ...	1,802,819	859,066	2,661,885	1,733,607	1,064,902	2,798,509	+ 69,212	— 205,836	— 136,624
Amraoti ...	...	675	675	...	275	275	...	+ 400	+ 400
Akola ...	...	2,837	2,837	...	549	549	...	+ 2,288	+ 2,288
Buldana ...	...	...	...	...	...	...	...	...	...
Basim ...	...	4,275	4,275	1,500	450	1,950	— 1,500	+ 3,825	+ 2,325
Wun ...	10,400	11,200	21,600	18,037	41,800	59,837	— 7,637	— 30,600	— 38 37
Total ...	1,813,219	878,053	2,691,272	1,753,144	1,107,976	2,861,120	+ 60,075	— 229,923	— 169,848

74. *The Demarcated State-Forests* show an increased out-turn of timber during the year, amounting to 33 per cent. This was confined to Ellichpur, and is connected with the Improvement-Fellings in the Bairagarh Reserve. The Conservator put a stop, during the year, to the old practice under which the produce of these fellings was auctioned and disposed of piecemeal at the convenience of the Ranger, and, instead, opened the entire area under improvement to the general public, who now come and take away what they want (of the material felled by the Department) on payment of rates that have been, with intent,

fixed on a very reasonable basis, the object being to create a market for an inferior class of material that the State is much concerned in cutting out with despatch. The new system promises to work well, as can be gathered from the increase in the outturn, even at this early period of its introduction.

The District Reserved and Unreserved Forests also show increased out-turns of timber during the year amounting to 16 per cent. The increase was general.

75. The out-turn of fuel shows a net increase for the year amounting to 42 per cent. The Demarcated State-Forests of Ellichpur, separated from the market by extensive open forests, find no present outlet for this class of produce. The Demarcated State-Forests of the other Districts, excepting only Basim and Wun, show a decidedly improved state of things. The decrease in Wun is attributed by the District Forest Officer to the Yeotmal cotton presses having this year secured their supply of fuel from Izara land in the vicinity of Yeotmal; and in part also from the District Reserved and Unreserved Forests. The small decrease in Basim has not been satisfactorily explained.

The out-turn of fuel from the *District Reserved and Unreserved Forests* shows important increases in the case of all Districts, excepting Ellichpur, where, however, the better prices realised more than compensated for the slight decrease in the out-turn—a decrease due to the smaller quantity of charcoal exported from the Melghat open forests.

76. The resources of private lands have been too much drawn upon in the past, and the consequence is that the people, as also numerous managers of cotton presses—in Akola particularly—are more dependent on the State Reserves than hitherto for their supplies as regards both timber and fuel. It is necessary to remark, however, that exceptional circumstances conduced to swell the revenue producing outturn of the year. Thus, it having been represented to the Deputy Commissioner of Akola that the usefulness of the Free-Grazing-Numbers as sources of pasture was frequently impaired by the dense growth of Babul trees found thereon, permission was given, in several instances, to auction these woods forthwith. In Wun again, the Deputy Commissioner imposed restrictions on the free removal of produce (from the District Reserved and Unreserved Forests) which had a corresponding effect on the Revenues, and, hence, on the recorded figures of the out-turn for timber and fuel.

77. The outturn of bamboos decreased by some 6 per cent. This was due in part to the prevalence of cholera and small-pox in the Melghat during the early part of the year, and in part to the scarcity of export labour, consequent on the high wages obtained on the construction of the new Gugamal-Akot road. In Wun the decrease was the result of restrictions imposed by the Deputy Commissioner—restrictions said to have been necessitated by previous over-cutting in the Pandharkowda Taluk.

78. Appendix A is a comparative statement showing the number of cattle that grazed in the several classes of forest during the year.

The number of cattle which paid dues for grazing in the Government Forests was 1,434,297 against 1,431,616 in the previous year.

The number which grazed in the Demarcated State-Forests was 18,533 only, against 36,013 in the previous year, and 72,959 in the year before that. Since

October 1889 this grazing of cattle in the Demarcated State-Forests has been confined to the forests of Buldana. Reference to this will be found in paragraph 49.

The number of cattle which paid dues during the year for grazing within the District Reserved and Unreserved Forests was 20,161 in excess of the previous year, and 35,304 in excess of the year 1887-88. Notwithstanding, the control is not what it ought to be, as can be gathered from the fluctuations shown in the following abstract, which compares the results of three years:—

	1888-89. Difference in favour of, or against the year in the No. of cattle for which dues were paid.	1889-90. Difference in favour of, or against the year in the No. of cattle for which dues were paid	Increase or decrease in the present year with reference to the results of 1887-88.
Ellichpur District ..	— 8,449	— 6,601	—15,050
Amraoti do. ...	— 1,822	— 8,016	— 9,838
Akola do. ...	+45,896	— 6,929	+38,967
Buldana do. ...	—14,925	+26,507	+11,582
Basim do. ...	—47,461	+37,570	— 9,891
Wun do. ...	+41,904	—22,370	+19,534

The large decrease in Wun during the present year is ascribed to difficulties with the Izardars, who, founding their claims on the terms of their leases, refused to pay, as hitherto, the grazing dues demanded of them. As observed in paragraph 46, there is much that is unsatisfactory in our present relations with the Izardars of Wun.

79. The outturn in Minor Forest Produce increased in value during the year by Rs. 2,434.

The increases of importance occurred in Wun, Basim, and Amraoti, under Grass, and Miscellaneous.

80. As the Melghat Forests produce the larger share of the outturn, the following table compares the yield of the Ellichpur Division in the present and the previous year:—

Produce.	Bairagarh Reserve.		Gugamal Reserve.		Chikalda Reserve.		District Reserved Forests.		Melghat Unreserved Forests.		Total.	
	1888-89.	1889-90	1888-89.	1889-90	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
Timber C. ft. ...	26,796	36,167	...	822	...	...	...	...	339,561	378,744	366,357	415,733
Fuel do. ...	...	385	...	...	...	...	5,894	17,871	262,451	243,414	268,345	261,670
Bamboos do. ...	1,078,606	975,745	654,201	827,074	...	...	...	...	1,064,902	859,066	2,797-709	2,661,885
Grass Rs....	...	...	...	..	...	...	...	...	...	...	3,742	2,879
Lac do....	...	...	...	...	...	...	...	...	...	...	118	147
Leaves do....	...	...	...	...	...	...	...	...	...	...	604	557
Roots and fruits do....	...	...	...	...	...	...	...	...	...	...	3,911	2,903
Gum do....	...	...	...	...	...	...	...	...	...	...	175	150
Miscellaneous Minor produce Rs. ...	...	...	...	...	...	...	...	...	...	...	62	65

3.—*Free Grants of Forest Produce.*

81. The following is a comparative statement of the Free-Grants made during the year. Their value was Rs. 114, against Rs. 873 in the previous year:—

Authority under which granted.	Name of Division or District.	Name of Grantee.	Purpose for which granted.	Produce granted.		
				Description.	Quantity.	Value in Rs.
Resident at Hyderabad ...	Amraoti.	The Public ...	Feed of cattle at agricultural show in Amraoti in 1889.	Grass.	Palas 16,000	12
Conservator of Forests, Hyderabad Assigned Districts.	Do.	Patel of Karasgaon.	Sarai and Hindu temple.	Timber.	C. ft. 100	25
Conservator of Forests, Hyderabad Assigned Districts.	Akola ...	Five villagers of Charmali and 12 of Kakerdari.	Building houses burnt down.	Do.	C. ft. 420	60
Conservator of Forests, Hyderabad Assigned Districts.	Basim...	Patel of Siwni.	Chaori ...	Do.	C. ft. 630	17
			Total ...	...	...	114

4.—*Produce removed by Right-Holders and under Concessions.*

82. There are no rights to forest produce in the Berar Forests. The concessions exist in the case of firewood, small timber of the unreserved species, minor forest produce, and cattle-grazing. The rules subsidiary to the new Berar Forest Law promise, for the first time, to define the scope of these concessions, but not so as to render the calculation of the outturn from this source a reliable statement, and it is preferable to forego statistics that are founded upon speculation.

CHAPTER V.—Financial Results.

83. The financial results of the year were the best on record for Berar, and compare as follows with those of the previous three years:—

Year.	Receipts. Rs.	Charges. Rs.	Surplus. Rs.
1886-87	3,26,447	1,71,510	1,54,937
1887-88	4,06,247	1,83,160	2,23,087
1888-89	4,08,192	1,69,295	2,38,897
1889-90	4,40,541	1,76,150	2,64,391

84. The surplus was Rs. 25,494 in excess of that for 1888-89, Rs. 41,304 in excess of that for 1887-88, and Rs. 1,09,454 in excess of that for 1886-87. The proportion of surplus to gross revenue was 60, against 58·6 in the previous year.

85. The revenue was realised from the following sources:—

	1889-90. Rs.	1888-89. Rs.
Timber	1,23,052	1,03,208
Fire-wood and charcoal	53,088	37,381
Bamboos	40,495	42,654
Grazing	1,69,292	1,71,194
Grass and other minor produce ...	53,106	50,672
Confiscated	821	1,132
Miscellaneous sources	687	1,951
Total ...	4,40,541	4,08,192

During the year increases of revenue took place under:—

Timber	19,844
Firewood and charcoal ...	15,707
Grass and other minor produce...	2,434
Total ...	37,985

While decreases took place under:—

Bamboos	...	2,159
Grazing	...	1,902
Confiscated produce	...	311
Miscellaneous sources	...	1,264
Total	...	5,636

Balance in favour of the year, Rs. 32,349.

86. The following statement shows the expenditure of the year compared with that of the previous year:—

Budget Heads.	1889-90.	1888-89.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
A—*Conservancy and Works.*				
I. Timber and other produce removed from the forests by government agency	...	...	...	...
II. Timber and other produce removed from the forests by consumers and purchasers ...	28,451	21,364	7,087	...
V. Rent of leased forests and payments to shareholders in forests managed by government ...	15,558	17,120	...	1,562
VI. Live and dead stock ...	4,217	5,070	...	853
VII. Communications and buildings	21,498	18,930	2,568	...
VIII. Demarcation, improvement and extension of forests ...	10,233	10,391	...	158
IX. Miscellaneous	364	1,750	...	1,386
Total A—Conservancy and Works	80,321	74,625	9,655	3,959
B—*Establishment.*				
I. Salaries	77,902	76,305	1,597	...
II. Travelling allowances ...	12,716	13,201	...	485
III. Contingencies	5,211	5,164	47	...
Total B—Establishment ...	95,829	94,670	1,644	485
Grand total of expenditure...	1,76,150	1,69,295	11,299	4,444

87. The expenditure thus increased during the year by Rs. 6,855, the increases of importance occurring under A-II (percentages to village officials on account of forest revenues collected by them; and the printing of pass books at private presses), A-VII (Communications and Buildings), and under B-I (due to the promotion of Messrs. Prevost and Taylor; and to Mr. Haldane's appointment as a Sub-Assistant Conservator in Berar).

88. The surplus and deficit under the three great heads of accounts were as follows for the past four years:—

Sources of revenue and expenditure.	1886-87.		1887-88.		1888-89.		1889-90.	
	Surplus.	Deficit	Surplus.	Deficit.	Surplus.	Deficit.	Surplus	Deficit.
I. Departmental timber operations.	...	...	...	...	...	...	...	...
II. Other revenue ...	2,05,720	...	2,85,430	...	2,93,154	...	3,21,130	...
III. Protection ...	...	50,783	...	62,343	...	54,257	...	56,739
Total ...	2,05,720	50,783	2,85,430	62,343	2,93,154	54,257	3,21,130	56,739

89. The financial results by classes of forests are compared as follows with those of the previous year :—

1.—*Summary of Financial Results by Classes of Forests.*

Classes of Forests.	Revenue.		Expenditure.		Surplus.		Deficit.	
	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Demarcated State Forests ...	59,551	64,234	59,233	63,231	318	1,003	...	...
District Reserved and Unreserved Forests (excepting Ellichpur Unreserved Forests)	2,32,002	2,57,063	64,889	70,156	1,67,113	1,86,907	...	...
District Unreserved Forests of Ellichpur	1,16,639	1,19,244	45,173	42,763	71,466	76,481	...	...
Total ...	4,08,192	4,40,541	1,69,295	1,76,150	2,38,897	2,64,391	...	...

2.—*Financial Results by Classes of Forest and by Divisions.*

Division.	Classes of Forest.	Revenue.		Expenditure.		Surplus.		Deficit.	
		1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Direction...	Office	115	265	20,014	18,551	...	...	19,899	18,286
Ellichpur.	Office	1,098	3	16,899	16,519	...	..	15,301	16,516
	Demarcated State Forests.	33,791	38,391	26,579	31,283	7,212	7,108	...	...
	District Reserved Forests.	4,635	7,054	843	1,175	3,792	5,879	...	...
	Unreserved Forests, Melghat	1,15,853	1,19,172	28,272	27,068	87,581	92,104	...	...
		1,55,377	1,64,620	72,093	76,045	98,585	1,05,091	15,301	16,516
Amraoti...	Office	12	16	4,531	5,080	...	...	4,519	5,064
	Demarcated State Forests.	3,711	3,174	2,359	1,610	1,352	1,564	...	...
	District Reserved and Unreserved Forests ...	59,780	64,991	6,001	4,605	53,779	60,386	...	...
		63,503	6,81,181	12,891	11,295	55,131	61,950	4,519	5,064
Akola	Office	20	...	2,969	2,793	...	...	2,949	2,793
	Demarcated State Forests.	7,541	8,719	3,055	3,373	4,486	5,346	...	...
	District Reserved and Unreserved Forests ..	30,059	38,651	5,043	7,440	25,016	31,211	...	...
		37,620	47,370	11,067	13,606	29,502	36,557	2,949	2,793
Buldana.	Office	49	21	4,566	4,693	...	...	4,517	4,672
	Demarcated State Forests.	5,748	4,664	2,532	2,630	3,216	2,034	...	...
	District Reserved and Unreserved Forests ...	38,993	41,059	5,781	6,481	33,212	34,578	...	...
		44,790	45,744	12,879	13,804	36,428	36,612	4,517	4,672
Basim.	Office	410	16	10,051	11,161	...	...	9,641	11,145
	Demarcated State Forests	2,689	3,683	4,673	4,887	...	...	1,984	1,204
	District Reserved and Unreserved Forests ...	30,905	39,375	3,906	5,630	26,999	33,745	...	...
		34,004	43,074	18,630	21,678	26,999	33,745	11,625	12,349
Wun.	Office	8	...	6,256	5,893	...	...	6,248	5,893
	Demarcated State Forests.	5,646	5,540	6,783	6,343	...	...	1,137	803
	District Reserved and Unreserved Forests ...	67,129	65,747	8,682	8,935	58,447	56,812	...	...
		72,783	71,287	21,721	21,171	58,447	56,812	7,385	6,696
	Total ...	4,08,192	4,40,541	1,69,295	1,76,150	3,05,092	3,30,767	66,195	66,376
				Deduct deficit ...		66,195	66,375		
				Net surplus ...		2,38,897	2,64,391		

90. The revenues from all classes of forest underwent a net increase during the year, thus :—

Demarcated State Forests.

Ellichpur	...	+	4,600	Net increase = Rs. 4,683.
Akola	...	+	1,178	
Basim	...	+	994	
Amraoti	...	—	537	
Buldana	...	—	1,084	
Wun	...	—	106	
Office	...	—	362	

District Reserved and Unreserved Forests.

Ellichpur	...	+	6,538	Net increase = Rs. 27,666.
Amraoti	...	+	5,211	
Akola	...	+	8,592	
Buldana	...	+	2,066	
Basim	...	+	8,470	
Wun	...	—	1,382	
Office	...	—	1,829	

No explanations seem called for in respect to the above figures that are not intelligible by the remarks made under Yield and Working.

CHAPTER VI.—General Remarks.

91. The season was not a healthy one and the establishment suffered a good deal from fever.

92. In the controlling staff, Mr. Prevost and Mr. Mansukh Rai did good service within their respective charges.

Mr. Rassul Khan, Sub-Assistant Conservator, was removed during the year from the charge of the Amraoti Division, and transferred to the executive ranks of the Ellichpur Division, which, however, he did not join, as he almost immediately afterwards proceeded on one year's sick leave. The unsatisfactory work of this officer formed the subject of a special reference to Government.

The good promise shown by Mr. Wittinbaker (who was appointed a Sub-Assistant Conservator on probation in 1888) in the first year of his service has not endured. The Deputy Commissioner of Buldana, Colonel Szczepanski, refers to his work in unfavourable terms, and he certainly appears to have shown very little zeal for the safety of his forests from fire (see para. 45). He has been the subject of a special reference to Government.

93. With a few exceptions, the subordinate staff is favourably reported upon by the Divisional Officers. Rangers Misri Pershad, Sheik Rahman, Ramdial Singh, Ragonath Singh and Pandurang Narayan are all specially noticed in this connection.

94. The Conservator's office continued to be well managed under the superintendence of Mr. Ganesh Narayan.

E. P. DANSEY,

Offg. Conservator of Forests,

Hyderabad Assigned Districts.

APPENDICES.

FORESTS.

ANNUAL FORM No. 49.—*Area of Demarcated State Forests*, 1889-90.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1889.		Added during the year.	Excluded or transferred to other heads.	Area on 1st March 1890.		No. and date of notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.	Acres	Acres.	Acres.	Equivalent in square miles.		
Ellichpur	Bairagarh	Ellichpur	Bairagah Reserve	272,049	425			272,049	425		
	Gugamal	Do.	Gugamal do.	115,044	180			115,044	180		
	Chikalda	Do.	Chikalda do.	2,400	4			2,400	4		
				389,493	609			389,493	609		
Amraoti.	..	Amraoti	Chirodi Reserve	8,123	13			8,123	13	Hyderabad Residency Orders Notification No. 218, dated 17th September 1889; Conservator's No. 594, dated 29th July 1889, to Commissioner, Hyderabad Assigned Districts.	
		Do.	Mehdari do.	4,052	6	a 23		4,075	6		a. 17-6 of field No. 45 of Mehadari. 6-0 excluded in 1889-90.
				12,175	19	23	...	12,198	19		
Akola	..	Akola	Loni Reserve	908	1	...		908	1		
	...	Do.	Bhongaon Reserve	1,368	2	...		1,368	2		
	Ghatbori	Akola, Buldana and Basim	Ghatbori do.	23,760	37	.		23,760	37		
		Akola	Mandwa do.	5,475	9			5,475	9		
	...	Do.	Borgaon do.	1,435	2	.		1,435	2		
				32,946	51			32,946	51		
Buldana	Gerumatergaon	Buldana	Gerumatergaon Reserve.	45,947	72	...		45,947	72		
	Amdari	Do.	Amdari Reserve	13,717	21	..		13,717	21		
				59,664	93	..		59,664	93		
Basim	Kinwat	Basim	Penganga Reserve	11,575	18	.	..	11,575	18		
		Do.	Rui do.	6,647	10	.		6,647	10		
		Do.	Gahuli do.	9,507	15			9,507	15		
		Do.	Kinwat do.	52,558	82	.		52,558	82		
		Do.	Medsi do.	1,115	2			1,115	2		
		Do.	Mohoja do.	2,111	3	..	..	2,111	3		
		Do.	Chandus do.	3,016	5	...	.	3,016	5		
		Do.	Ekburji do.	172		.		172	..		
				86,701	135	...		86,701	135		
Wun	Kelapur	Wun	Kelapur Reserve	40,289	63	...		40,289	63		
	Wun	Do.	Tewsala do.	4,873	8			4,873	8		
	Yeotmal	Do.	Gondwakri do.	16,359	26	...		16,359	26		
	Do.	Do.	Kharad do.	15,514	24	.		15,514	24		
	Darwha	Do.	Anjankheir do.	7,634	12			7,634	12		
	Do.	Do.	Lonbehel do.	9,187	14	.		9,187	14		
	Do.	Do.	Pathrot do.	2,889	4	.	.	2,889	4		
				96,745	151	..		96,745	151		
			Total	677,724	a 1,059	23		677,747	a 1,059	....	a. Difference of one square mile in this column due to small fractions ignored.

FORESTS.

ANNUAL FORM NO. 49.—*Area of District Reserved Forests*, 1889-90.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 1st March 1890. Acres.	Area on 1st March 1890. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
Ellichpur ...	...	Ellichpur	Woods ...	1,390	2	...	...	1,390	2	Commissioner's No. 6324, dated 28th October 1889.	a. Given up for burial purposes.
			Ramnas ...	63	...	...	...	63	...		
			Grazing lands ...	34,536	54	...	a 2	34,534	54		
				35,989	56	...	2	35,987	56		
Amraoti ...	...	Amraoti	Woods ...	7,347	11	...	...	7,347	11	Commissioner's No. 5845, dated 1st November 1888. Commissioner's No. 2265, dated 14th May 1889. Commissioner's No. 5845, dated 1st November 1888.	a. Transferred from cultivation. b. 6 given up for cultivation. 99 given up for cultivation and for the new Gaolipura at Amraoti camp.
			Ramnas ...	13,523	21	...	...	13,523	21		
			Grazing lands ..	169,202	265	a 72	b 105	169,169	265		
				190,072	297	72	105	190,039	297		
Akola ...	...	Akola ...	Reserved Forests ...	46,971	73	..	...	46,971	73		
Buldana ...	...	Buldana ...	Reserved Forests ...	5,032	8	..	...	5,032	8		
Basim ...	...	Basim ...	Reserved Forests ..	9,147	14	...	...	9,147	14		
Wun ...	...	Wun	Woods ..	2,695	4	a 18	...	2,713	4	.....	a. Correction of area.
			Ramnas ...	16,476	26	...	...	16,476	26		
			Grazing lands ...	...	...	b 342,041	...	342,041	534	.....	b. Transferred from unreserved forests.
				19,171	30	342,059	...	361,230	564		
			Total ...	306,382	478	342,131	107	648,406	1,012		

ANNUAL FORM NO. 49.—*Area of District Unreserved Forests*, 1889-90.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1889. Acres.	Area on 1st April 1889. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 1st March 1890. Acres.	Area on 1st March 1890. Equivalent in square miles.	No. and date of notification of addition or transfer.	Remarks.
Ellichpur	Melghat Taluk..	Ellichpur ...	...	586,275	916	...	...	586,275	916		
	Remainder of district.			488	1	...	...	488	1		
	Land in Melghat Hills of Akot Taluk.	Akola ...	...	1,460	2	...	...	1,460	2		
	Jalgaon Taluk.			4,476	7	...	...	4,476	7		
				592,699	926	...	...	592,699	926		
Amraoti ...	...	Amraoti ...	...	21,561	34	...	a 24	21,537	34	.....	a. Given up for cultivation.
Akola ...	...	Akola ...	...	110,728	173	a 356	b 24	111,060	172	.....	a. Cultivation abandoned. b. Given up for cultivation.
Buldana ...	...	Buldana ...	...	115,476	180	a 1,784	...	117,260	183	.....	a. 100 due to correction of area. 1684 due to cultivation abandoned.
Basim ...	...	Basim ...	...	396,267	619	a1,03,518	b 106	499,679	781	.....	a. 2,847 cultivation abandoned. 100,671 correction of area. b. Given up for cultivation.
Wun ...	...	Wun ...	...	436,703	682	a 6,594	b 349,548	93,749	146	.....	a. Cultivation abandoned. b. 7,507 given up for cultivation. 342,041 grazing lands transferred to District Reserves
			Total ...	1,673,434	2,614	112,252	349,702	1,778,025	2,243		

FORESTS.

ANNUAL FORM No. 50.—*Prosecution for breaches of Forest Rules during 1889-90.*

Forest Division and Civil District.	Cases pending from 1888-89.	New cases of the year.					Total cases.	Disposed of during the year.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission, or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals		Total.		
								Cases	Persons.	Cases.	Persons.	Cases.	Persons.	
Ellichpur.														
Demarcated State-Forests ...	...	...	36	...	1	37	37	35	46	2	9	37	55	...
District Reserved Forests ...	...	...	8	...	...	8	8	8	13	..	..	8	13	...
District Unreserved Forests ..	1	...	63	2	...	65	66	54	87	10	32	64	119	2
Total .. 1889-90 ..	1	...	107	2	1	110	111	97	146	12	41	109	187	2
Total .. 1888-89 ...	...	...	29	...	122	151	151	126	174	24	51	150	225	1
Amraoti.														
Demarcated State-Forests ...	...	...	...	...	...	...	...	...	...	...	...	..	...	...
District Reserved and Unreserved Forests ...	1	1	36	...	...	37	38	29	65	9	19	38	84	...
Total ... 1889-90 ...	1	1	36	...	...	37	38	29	65	9	19	38	84	...
Total ... 1888-89 ...	...	...	27	1	6	34	34	25	42	8	8	33	50	1
Akola.														
Demarcated State-Forests ...	...	2	3	..	...	5	5	5	8	...	...	5	8	...
District Reserved and Unreserved Forests ...	..	1	9	...	11	21	21	18	36	3	8	21	44	...
Total ... 1889-90 ...	...	3	12	...	11	26	26	23	44	3	8	26	52	..
Total ... 1888-89 ...	...	1	48	5	1	55	55	44	55	11	27	55	82	...
Buldana.														
Demarcated State-Forests ...	...	...	2	...	...	2	2	2	5	...	...	2	5	...
District Reserved and Unreserved Forests ...	...	...	68	...	...	68	68	52	76	16	19	68	95	...
Total ... 1889-90 ...	...	...	70	...	...	70	70	54	81	16	19	70	100	...
Total ... 1888-89 ...	2	4	131	7	...	142	144	129	203	15	26	144	229	...
Basim.														
Demarcated State-Forests ...	...	2	4	6	...	12	12	10	30	2	17	12	47	...
District Reserved and Unreserved Forests ...	...	...	33	...	25	58	58	49	54	9	20	58	74	...
Total ... 1889-90 ...	...	2	37	6	25	70	70	59	84	11	37	70	121	...
Total ... 1888-89 ...	3	1	68	...	2	71	74	64	86	10	22	74	108	...
Wun.														
Demarcated State-Forests ...	2	3	5	9	4	21	23	17	43	6	19	23	62	...
District Reserved and Unreserved Forests ...	2	...	41	..	6	47	49	44	67	3	8	47	75	2
Total ... 1889-90 ...	4	3	46	9	10	68	72	61	110	9	27	70	137	2
Total ... 1888-89 ...	...	...	34	6	3	43	43	29	53	10	22	39	75	4
Abstract.														
Demarcated State-Forests. 1889-90 ...	2	7	50	15	5	77	79	69	132	10	45	79	177	...
Demarcated State-Forests. 1888-89 ...	...	6	28	8	5	47	47	34	100	11	32	45	132	2
District Reserved and Unreserved Forests. 1889-90 ...	4	2	258	2	42	304	308	254	398	50	106	304	504	4
District Reserved and Unreserved Forests. 1888-89 ...	5	...	309	11	129	449	254	383	513	67	124	450	637	4
Total .. 1889-90 ...	6	9	308	17	47	381	387	323	530	60	151	383	681	4
Total .. 1888-89 ...	5	6	337	19	134	496	501	417	613	78	156	495	769	6

FORESTS.

ANNUAL FORM No. 51.—*Area of Forest Tracts protected from fire during the dry season* 1890—*to accompany Report for* 1889-90.

Division.	Forest Tracts	Year in which protection commenced.	Area actually protected up to 30th June 1889	During dry season of 1890.			Cost during the season up to 30th June 1890.
				Area attempted to be protected.	Failures.	Actually protected.	
			Acres.	Acres.	Acres.	Acres.	Rs.
Ellichpur ...	Raipur block of Bairagarh Reserve ...	1870	14,231	14,231	...	14,231	310
	Remainder of Bairagarh Reserve ...	1872	257,651	257,818	...	257,818	1,633
	Gugamal Reserve ...	1877	114,724	115,044	...	115,044	760
	Chikalda Reserve ...	1890	...	2,400	...	2,400	165
	Total ...	...	386,606	389,493	...	389,493	2,868
Amraoti ...	Chirodi Reserve ...	1881	8,123	8,123	...	8,123	201
	Mahdari Reserve ...	1889	4,052	4,075	...	4,075	119
	Total ...	...	12,175	12,198	...	12,198	320
Akola ...	Loni Reserve ...	1882	908	908	...	908	...
	Bhongaon Reserve ...	1882	1,368	1,368	...	1,368	...
	Ghatbori Reserve ...	1881	23,760	23,760	4	23,756	771
	Mandwa Reserve ...	1882	5,475	5,475	...	5,475	
	Borgaon Reserve ...	1889	1,435	1,435	..	1,435	...
	Total ...	...	32,946	32,946	4	32,942	771
Buldana ...	Gerumatergaon Reserve	1880	45,926	45,947	6,500	39,447	132
	Amdari	1883	13,681	13,717	29	13,688	132
	Total ..	...	59,607	59,664	6,529	53,135	264
Basim ...	Penganga Reserve ...	1880	11,575	11,575	1,080	10,495	81
	Rui do. ...	1882	6,647	6,647	330	6,317	70
	Gahuli do. ...	1885	9,507	9,507	15	9,492	139
	Kinwat do. ...	1881	51,915	52,558	...	52,558	708
	Medsi do. ...	1889	1,115	1,115	7	1,108	28
	Mohoja do. ...	1889	2,111	2,111	316	1,795	...
	Chandus do. ...	1889	3,015	3,016	...	3,016	26
	Ekburji do. ...	1889	172	172	...	172	...
	Total ...	...	86,057	86,701	1,748	84,953	1,047
Wun	Kelapur Reserve ...	1881	40,209	40,289	60	40,229	819
	Tiwsala do. ...	1882	4,813	4,873	...	4,873	195
	Gondwakri do. ...	1882	7,559	16,359	900	15,459	309
	Kharad do. ...	1882	13,499	15,514	750	14,764	389
	Anjankhed do. ...	1882	7,634	7,634	...	7,634	131
	Lonbehel do. ...	1882	9,187	9,187	...	9,187	158
	Pathrot do. ...	1882	2,889	2,889	...	2,889	205
	Total ...	...	85,790	96,745	1,710	95,035	2,206
	Grand Total ...	...	667,967	677,747	9,991	667,756	7,476

FORESTS.

ANNUAL FORM No. 52.—*Area of plantations and cultural operations*, 1889-90.

Division.	Name of Plantation.	Area in acres. On 1st April 1889.	Added during the year.	Excluded during the year.	Area on 31st March 1890.	Receipts. Of the year.	Charges. Of the year.	Remarks.
	(1)—*Regular Plantations.*							
	Bairagarh Reserve.							
Ellichpur ...	Abapur	120	...	120	...	...	...	
	Bujru	31	...	31	...	...	...	
	Dugapati...	11	...	11	...	...	...	
	Jambulwari	600	...	600	...	...	...	
	Kolkaz	1	...	1	...	...	...	
	Labu	279	...	279	...	...	...	
	Pili	52	...	52	...	...	...	
	Pipalcotah	160	...	160	...	...	...	
	Rakiadoh	13	...	13	...	...	...	
	Saoli	110	..	110	...	...	...	
	Saoli and Kuitha	30	...	30	...	...	...	
	Sembadoh	2	...	2	...	...	...	
	Total Regular Plantations ...	1,409	...	1,409	...	...	...	
	(2)—*Cultural Operations.*							
Ellichpur ...	Bairagarh Reserve	10	*320	10	320	...	341	*Sown with teak, tewas, haldu, dhowra and bamboo.
	Gugamal do.	751	...	751	...	...	...	
	Chikalda do.	...	...	...	...	...	120	Forest garden.
	District Forests	2	...	...	2	...	180	Date plantation.
	Miscellaneous	...	...	...	...	...	2	
		763	320	761	322	...	643	
Amraoti	Chirodi Reserve	1,420	...	1,420	...	...	53	
	District Forests	917	...	917	...	...	132	
	Miscellaneous	...	...	...	...	...	50	
		2,337	...	2,337	...	...	235	
Akola ...	Loni Reserve	410	*25	...	435	...	2	*Sown with telia babul.
	Bhongaon do	439	*50	...	489	...	5	
	Ghatbori do	590	320	590	320	...	174	†Sown with babul, aonla, tamarind and mango.
	District Forests	195	...	195	...	...	...	
	Miscellaneous	...	...	...	...	...	7	
		1,634	395	785	1,244	...	188	
Buldana ...	Gerumatergaon Reserve ...	909	*115	909	115	...	65	*Sown with nim, babul sadra, tamarind, dhowra and tembroon.
	Amdari — do ...	87	...	87	...	...	...	
		996	115	996	115	...	65	
Basim ...	Penganga Reserve	2,091	...	2,091	...	...	...	
	Rui do.	1,125	*39	864	300	...	121	*Sown with teak, dhowra and miscellaneous.
	Kinwat do.	102	...	102	...	...	...	
	Medsi do.	300	...	300	...	...	...	
	Mohoja do.	411	...	411	...	...	...	
	District Forests	393	...	393	...	...	...	
	Miscellaneous	...	...	...	...	...	35	
		4,422	39	4,161	300	...	156	
Wun ...	Kelapur Reserve	132	...	132	...	...	35	
	Tewsala do.	61	...	61	...	..	6	
	Gondwakri do.	152	...	152	...	...	3	
	Kharad do.	562	...	162	400	...	174	
	Anjankhed do.	277	...	277	...	...	...	
	Lonbehel do.	31	...	31	...	...	...	
	Pathrot do.	51	...	51	...	...	1	
		1,266	...	866	400	...	219	
	Total Cultural Operations ...	11,418	869	9,906	2,381	...	1,506	

FORESTS.

ANNUAL FORM No. 54.—*Outturn (in cubic feet solid) of Timber and Fuel during the year* 1889-90 *and Agency of Exploitation.*

Division.	Timber in the rough logs.					Timber in the rough poles.				Sawn or squared timber.					Miscellaneous.					Fuel.				
	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Government.	Purchasers.	Free grantees.	Right holders.	Total.	Total outturn, cubic feet.
(1).—*Demarcated State Forests.*																										
Ellichpur ...	...	5,143	...	...	5,143	...	31,846	...	...	31,846	...	...	...	...	...	...	...	...	...	...	...	385	...	...	385	37,374
Amraoti ...	...	...	...	...	...	...	20	...	...	20	...	...	...	...	...	...	...	...	...	...	...	3,125	...	...	3,125	3,145
Akola ...	...	...	...	...	...	...	42	...	...	42	...	...	...	...	...	...	...	...	...	...	...	94,259	...	...	94,259	94,301
Buldana ...	...	...	...	...	...	...	252	...	...	252	...	...	...	...	...	...	...	...	...	...	...	18,323	...	...	18,323	18,575
Basim ...	...	...	...	...	...	...	117	...	...	117	...	...	...	...	...	...	...	...	...	...	...	205	...	...	205	322
Wun ...	...	...	...	...	...	...	230	...	...	230	...	...	...	...	...	...	...	...	...	...	...	700	...	...	700	930
Total ...	...	5,143	...	...	5,143	...	32,507	...	...	32,507	...	...	...	...	...	...	...	...	...	...	...	116,997	...	...	116,997	154,647
(2).—*District Reserved and Unreserved Forests.*																										
Ellichpur—Reserves only.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17,871	...	...	17,871	17,871
Amraoti ...	...	...	...	...	...	...	213	...	...	213	...	...	...	...	...	...	...	100	...	100	...	87,858	...	...	87,858	88,171
Akola ...	...	...	...	...	...	...	5,130	420	...	5,550	...	...	...	...	...	...	...	...	...	...	...	391,888	...	...	391,888	397,438
Buldana ...	...	...	...	...	...	...	90,239	...	...	90,239	...	...	...	...	...	...	...	...	...	...	...	62,588	...	...	62,588	152,827
Basim ...	...	...	...	...	...	...	71,371	...	...	71,371	...	...	...	...	...	...	...	630	...	630	...	117,155	...	...	117,155	189,156
Wun ...	...	...	...	...	...	...	2,844	...	...	2,844	...	...	...	...	...	...	...	...	...	...	...	89,077	...	...	89,077	91,921
Ellichpur—Unreserves only.	...	...	...	...	...	...	378,744	...	...	378,744	...	...	...	...	...	...	...	...	...	...	...	243,414	...	...	243,414	622,158
Total ...	...	...	...	...	...	...	548,541	420	...	548,961	...	...	...	...	...	...	...	730	...	730	...	1,009,851	...	...	1,009,851	1,559,542
Grand Total ...	...	5,143	...	...	5,143	...	581,048	420	...	581,468	...	...	...	...	...	...	...	730	...	730	...	1,126,848	...	...	1,126,848	1,614,189

FORESTS.

ANNUAL FORM No. 55.—*Outturn of Minor Forest Produce during the year* 1889-90.

Division.	Description of produce.	Produce removed or utilized.									
		By Government Agency.		By Purchasers.		By free grants.		By right holders		Total.	
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
			RS.		RS.		RS.		RS.		RS.
	(1.) DEMARCATED STATE FORESTS.										
Ellichpur ...	Bamboos ...	...	...	1,802,819	27,042	...	...	...	...	1,802,819	27,042
	Grass	...	...	...	11	...	...	...	...	...	11
	Lac	...	...	...	6	...	...	...	...	...	6
	Roots and fruits ...	...	...	...	104	...	...	...	...	...	104
	Miscellaneous minor produce ...	...	...	...	2	...	...	...	...	...	2
Amraoti ...	Grass	...	...	...	2,988	...	12	...	...	...	3,000
	Fruits	...	...	...	66	...	...	...	...	...	66
	Leaves	...	...	...	18	...	...	...	...	...	18
	Miscellaneous minor produce ...	...	...	...	2	...	...	...	...	...	2
Akola ...	Grass	...	...	...	2,824	...	...	...	...	...	2,824
	Miscellaneous minor produce ...	...	...	...	176	...	...	...	...	...	176
Buldana ...	Grass	...	...	...	994	...	...	...	...	...	994
	Miscellaneous minor produce ...	...	...	...	46	...	...	...	...	...	46
Basim ...	Grass	...	...	...	2,390	...	...	...	...	...	2,390
	Miscellaneous minor produce ...	...	...	...	7	...	...	...	...	...	7
Wun ...	Bamboos ...	...	...	10,400	208	...	...	...	...	10,400	208
	Grass	...	...	...	5,248	...	...	...	...	...	5,248
	(2.) DISTRICT RESERVED AND UNRESERVED FORESTS.										
Ellichpur reserves only.	Grass	...	...	...	686	...	...	...	...	...	686
	Fruit	...	...	...	875	...	...	...	...	...	875
Amraoti ...	Bamboos ...	...	...	675	7	...	...	...	...	675	7
	Grass	...	...	...	14,732	...	...	...	...	...	14,732
	Leaves	...	...	...	580	...	...	...	...	...	580
	Fruits	...	...	...	3,533	...	...	...	...	...	3,533
	Minerals ...	...	...	...	233	...	...	...	...	...	233
	Gum	...	...	...	885	...	...	...	...	...	885
	Miscellaneous minor produce ...	...	...	...	1,052	...	...	...	...	...	1,052
Akola ...	Bamboos ...	...	...	2,837	28	...	...	...	...	2,837	28
	Grass	...	...	...	946	...	...	...	...	...	946
	Miscellaneous minor produce ...	...	...	...	651	...	...	...	...	...	651
Buldana ...	Grass	...	...	...	775	...	...	...	...	...	775
	Minerals ...	...	...	...	8	...	...	...	...	...	8
	Leaves	...	...	...	144	...	...	...	...	...	144
	Fruits	...	...	...	1,236	...	...	...	...	...	1,236

FORESTS.

ANNUAL FORM No. 55.—*Outturn of Minor Forest Produce during the year* 1889-90.

Division.	Description of produce.	Produce removed or utilized. By Government Agency. Quantity.	By Government Agency. Value.	By Purchasers. Quantity.	By Purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right holders. Quantity.	By right holders. Value.	Total. Quantity.	Total. Value.
			RS.		RS.		RS.		RS		RS.
Basim ...	Bamboos	...	...	4,275	86	...	...	...	...	4,275	86
	Grass	...	...	...	315	...	...	...	...	...	315
	Miscellaneous minor produce ...	...	...	...	2,081	...	...	...	...	...	2,081
Wun ...	Bamboos	...	...	11,200	238	...	...	...	...	11,200	238
	Grass	...	...	...	1,320	...	...	...	...	...	1,320
	Fruits	...	...	...	2,987	...	...	...	...	...	2,987
	Miscellaneous minor produce ...	...	...	...	168	...	...	...	...	...	168
Ellichpur (unreserves only)	Bamboos ... ... No. ...	...	...	859,066	12,886	...	..	...	...	859,066	12,886
	Grass	...	...	...	2,182	...	...	..	...	...	2,182
	Lac	...	...	...	141	...	...	...	...	...	141
	Leaves	..	...	...	557	...	...	...	...	...	557
	Roots and fruits	..	...	...	1,924	..	...	...	...	...	1,924
	Gum	...	...	...	150	...	...	...	...	...	150
	Minerals	...	...	...	15	...	...	...	...	...	15
	Miscellaneous minor produce ...	...	...	...	48	...	...	...	...	...	48
	ABSTRACT.										
1888-89 ...	Bamboos ... No.	..	...	2,860,320	42,654	...	12	...	...	2,860,320	42,666
1889-90 ...		...	...	2,691,272	40,495	...	...	...	...	2,691,272	40,495
1888-89 ...	Grass	..	..	...	33,185	...	265	...	...	..	33,450
1889-90 ...		...	...	..	35,411	...	12	...	...	...	35,423
1888-89 ...	Roots and fruits	...	...	...	14,492	...	...	...	...	...	14,492
1889-90 ...		..	...	...	10,725	...	..	...	...	...	10,725
1888-89 ...	Lac	...	..	...	113	...	...	...	...	...	113
1889-90 ..		...	...	...	147	...	...	...	...	...	147
1888-89 ...	Leaves	...	...	...	1,062	..	...	...	...	...	1,062
1889-90 ...		...	...	...	1,299	...	...	...	...	...	1,299
1888-89 ...	Minerals	..	...	...	170	..	...	...	...	...	170
1889-90 ...		..	...	...	256	...	...	...	...	...	256
1888-89 ...	Gum	...	..	...	649	...	...	..	...	...	649
1889-90 ..		...	...	...	1,035	...	...	...	...	...	1,035
1888-89 ...	Miscellaneous minor produce ...	...	...	...	1,001	...	...	..	..		1,001
1889-90 ...		...	..	...	4,233	...	...	...	...	...	4,233
1888-89 ...	Total ...	...	...	...	93,326	..	277	..	...	...	93,603
1889-90 ...		...	...	...	93,601	...	12	..	..	...	93,613

FORESTS.

ANNUAL FORM No. 57.—*Abstract showing the Value of Live and Dead Stock for the year* 1889-90.

Description of Timber and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No.	C. ft.	Value.	No.	C. ft.	Value.	In favor of the year.	Against the year.	
Direction Office.			Rs.			Rs.	Rs.	Rs.	
Surveying and other instruments ...	11	...	..	11	...	...	...	...	
Tools	18	...	10	18	...	10	...	...	
Office furniture	129	...	501	129	...	501	...	...	
Tents	8	...	537	8	...	537	...	...	
Miscellaneous	51	...	93	51	...	93	...	...	
Elephant	1	...	2,400	1	...	2,400	...	...	
Total ...	218	...	3,541	218	...	3,541	...	...	
Ellichpur Division.									
Surveying and other instruments ...	18	...	...	20	...	135	...	...	
Tools	767	...	483	763	...	480	...	...	
Office furniture	195	...	752	198	...	760	...	...	
Tents	6	...	520	6	...	520	...		
Bungalows	2	...	8,000	2	...	8,000	...	...	
Miscellaneous	250	..	345	248	...	340	...	...	
Elephant	1	...	450	1	...	450	...	...	
Bullocks	5	...	113	1	...	40	...	...	
Buffaloes	3	...	65	...	...	...	...	...	
Total ...	1,247	...	10,728	1,239	...	10,725	...	3	
Amraoti Division.									
Surveying and other instruments ...	5	...	16	5	...	16	...	...	
Tools	60	...	74	50	...	60	...	...	
Office furniture	48	...	240	49	...	254	...	...	
Tents	3	...	350	3	...	332	...	...	
Miscellaneous	41	...	65	41	...	61	...	...	
Total ...	157	...	745	148	...	723	...	22	
Akola Division.									
Tools	236	...	...	216	...	...	...	...	
Offie furniture	46	...	131	44	...	128	...	..	
Tents	3		367	3	...	331	...	...	
Miscellaneous	68	...	94	68	...	85	...	...	
Total ...	353	...	592	331	...	544	...	48	
Buldana Division.									
Surveying and other instruments ..	5	...	...	6	...	...	...	...	
Tools	99	...	...	97	...	...	...	...	
Office furniture	45	...	281	52	...	410	...	...	
Tents	4	...	261	4	...	261	...	...	
Building	1	...	1,000	1	...	1,000	...	...	
Miscellaneous	91	...	91	91	..	91	...	...	
Total ...	245	...	1,633	251	...	1,762	129	...	
Basim Division.									
Surveying and other instruments ...	10	...	...	10	..	...	...	...	
Tools	259	...	91	223	...	82	...	...	
Office furniture	59	...	45	54	...	40	...	...	
Tents	4	...	311	3	...	392	...	...	
Miscellaneous	84	...	215	77	...	194	...	...	
Elephant	1	...	1,140	1	...	1,084	...	...	
Total ...	417	...	1,802	368	...	1,792	...	10	
Wun Division.									
Surveying and other instruments ..	33	...	4	32	...	200	...	...	
Tools	91	...	288	91	...	275	...	...	
Office furniture	63	...	699	63	...	680		...	
Tents	3	...	345	3	...	345	...	...	
Miscellaneous	79	...	158	79	...	170	...	...	
Elephant	1	...	...	1	...	500	...	...	
Buildings	...	...	...	4	...	2,100	...	...	
Total ...	270	..	1,494	273	...	4,270	2,776	...	
Grand Total ...	2,907	...	20,535	2,828	...	23,357	2,905	83	

FORESTS.

ANNUAL FORM No. 58.—*Final Summary of Revenue and Expenditure during* 1889-90.

Budget Heads.	Direction Office.	District Forests.						Total.
		Akola.	Amraoti.	Buldana.	Basim.	Ellichpur.	Wun.	
REVENUE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—Timber and other produce removed from the forests by Government agency:—								
a. Timber	...	...	...	...	...	...	...	...
b. Firewood and charcoal ...	...	...	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...	...	...
d. Sandalwood	...	...	...	...	...	..	...	...
e. Grass and other minor produce.	...	...	...	...	...	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers:—								
a. Timber	...	795 5 0	78 10 0	13,350 3 0	11,456 0 0	96,722 4 0	649 9 0	1,23,051 15 0
b. Firewood and charcoal ..	...	19,977 7 0	17,273 3 7	2,221 14 6	2,628 6 9	8,828 14 6	2,158 6 9	53,088 5 1
c. Bamboos	...	28 6 0	6 12 0	...	85 8 0	39,927 15 6	446 8 6	40,495 2 0
d. Grazing and fodder grass ...	...	25,669 12 6	44,299 4 0	28,576 4 8	26,504 13 5	14,948 14 9	61,794 0 6	2,01,793 1 10
e. Other minor produce	...	82[illegible] 7 3	6,369 4 3	1,433 10 0	2,087 15 9	3,820 13 0	6,065 3 3	20,604 5 6
III.—Drift and waif wood and confiscated forest produce	...	41 11 0 A—0 5 0	72 14 6	139 1 6	293 13 0	112 12 9	160 4 3	820 4 0
IV.—Revenue from forests not managed by Government:—								
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	..	...	...	...	...
V.—Miscellaneous:—								
a. Fines and forfeitures ...	...	25 8 0	54 10 0	...	...	...	...	80 2 0
b. Refunds	22 12 1	0 '0 8	26 11 4	0 5 4	0 13 4	1 12 0	8 0 0	61 0 9
c. Other sources	242 11 4	3 10 6	...	22 9 11	16 3 0	256 1 0	5 0 0	546 3 9
Total revenue ...	265 7 5	47,369 13 11 —0 5 0	68,181 5 8	45,744 0 11	43,073 9 3	1,64,619 7 6	71,287 0 3	4,40,540 7 11

A.—Being the amount erroneously credited in Forest accounts, now transferred with reference to Akola Deputy Commissioner's No. 1103, dated 2nd May 1890.

FORESTS.

Final Summary of Revenue and Expenditure during 1889-90.

Budget Heads.	Direction Office.	District Forests. Akola.	Amraoti.	Buldana.	Basim.	Ellichpur.	Wun.	Total.
EXPENDITURE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Conservancy and Works.								
I.—Timber and other produce removed from the forests by Government agency:—								
a. Timber,	...	...	...	...	...	...	...	...
b. Firewood and charcoal ...	...	...	...	...	...	...	...	...
c. Bamboos	...	...	...	...	...	...	...	...
d. Sandal wood	...	...	...	...	...	...	...	...
e. Grass and other minor produce ..	...	...	...	...	...	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers.	...	5,437 9 10	3,938 0 4	5,100 12 11	4,275 3 1	2,341 1 0	7,358 5 10	28,451 1 0
III.—Drift and waif wood and confiscated forest produce	...	...	...	...	...	...	...	...
IV.—Revenue from forests not managed by Government:—								
a. Duty on foreign timber and other forest produce	...	...	...	...	...	...	...	...
b. Revenue from shared and private forests	...	...	...	...	...	...	...	...
V.—Rent of leased forests and payments to shareholders in forests managed by Government	...	...	...	...	...	15,557 12 5	...	15,557 12 5
VI.—Live stock, stores, tools, and plant:—								
a. Purchase of cattle	...	...	...	...	...	...	...	...
b. Feed and keep of cattle	883 5 10	...	...	...	974 13 6	848 0 11	821 13 4	3,528 1 7
c. Purchase of stores, tools, and plant	71 3 3	35 9 6	37 11 6	240 15 4	122 6 9	114 12 0	66 11 0	689 5 4
VII.—Communications and buildings:—								
a. Roads and bridges	...	62 10 6	57 11 0	...	77 9 0	13,091 6 10	47 11 6	13,337 1 4
b. Buildings	65 12 10	77 12 11	166 14 0	214 12 9	135 15 3	6,226 6 3	282 4 6	7,169 14 6
c. Other works	...	...	...	...	...	991 7 6	...	991 7 6
VIII.—Demarcation, improvement, and extension of forests:—								
a. Demarcation	...	159 11 0	460 8 0	112 5 6	144 4 0	62 1 9	91 14 3	1,039 12 6
b. Compensation for land and rights...	...	...	120 0 0	...	...	25 0 0	...	145 0 0
c. Surveys and working plans ...	55 12 0	...	...	...	...	...	95 12 3	151 8 3
d. Sowing and planting	...	188 1 10	235 7 9	64 12 0	156 2 5	642 9 1	218 10 4	1,505 11 5
e. Protection from fire	...	799 4 2	383 10 0	258 2 8	1,044 6 6	2,784 7 0	2,042 5 5	7,312 3 9
f. Other works	...	...	...	...	...	77 12 0	...	77 12 0
IX.—Miscellaneous:—								
a. Refunds	...	0 5 4	75 9 0	10 0 0	...	9 0 0	...	94 14 4
b. Law charges	...	...	...	...	...	...	1 5 0	1 5 0
c. Other charges	16 14 6	16 15 4	19 11 1	71 13 1	21 14 7	72 12 10	48 0 4	268 1 9
Total A.—Conservancy and Works ...	1,093 0 5	6,778 0 5	5,504 2 8	6,073 10 3	6,952 11 7	42,844 9 7	11,074 13 9	80,321 0 8
B.—Establishment.								
I.—Salaries:—								
a. Conservators	11,966 2 1	...	...	...	...	...	...	11,966 2 1
b. Superior Officers	...	1,285 7 8	1,800 0 0 A+221 15 0	1,800 0 0	6,596 12 5	8,726 7 3	2,400 0 0	22,830 10 4
c. Subordinate Forest and Depot establishments	...	3,647 11 0	1,954 4 10 A−221 15 0	2,745 7 0	4,410 0 10	15,816 14 10	4,596 8 6	32,949 0 0
d. Office establishments ...	3,384 6 1	482 1 1	688 5 1	941 8 0	838 5 11	2,826 4 9	995 3 9	10,156 2 8
e. Deputation and special allowances	...	...	...	...	...	...	...	...
II.—Travelling allowances:—								
a. Conservators	1,215 0 0	...	...	...	...	...	...	1,215 0 0
b. Superior Officers	...	100 0 0	418 10 8 B+85 4 0	592 0 0	1,594 4 0	2,439 4 0	737 4 0	5,966 10 8
c. Subordinate Forest and Depot establishments	...	731 2 8	264 13 4 B−85 4 0	684 0 0	644 0 0	1,642 15 4	549 8 0	4,631 3 4
d. Office establishments... ...	166 15 8	162 9 4	98 0 8	196 2 8	123 14 8	208 1 4	148 0 4	1,103 12 8
III.—Contingencies:—								
a. Stationery	83 2 5 C+89 4 2	16 6 3 +44 15 0	15 1 0 +34 8 0	11 3 6 +45 1 3	17 14 0 +46 12 5	C109 12 6 +90 4 8	15 6 9 +48 7 1	668 3 0
b. Carriage of tents and records ..	302 1 1	289 8 10	266 6 4	448 9 5	352 1 3	655 5 6	371 15 1	2,685 15 11
c. Rents, rates and taxes ...	...	...	180 0 0	150 0 0	...	300 0 0	180 0 0	810 0 0
d. Pay of police guards... ...	...	...	...	...	...	...	...	...
e. Official postage	231 10 0	82 1 0	41 7 0	70 7 0	62 9 0	338 4 0	18 2 6	844 9 0
f. Sundries	108 14 1	30 11 7	63 13 5	90 10 0	85 13 11	186 13 10	83 15 7	600 12 5
Total B.—Establishments ...	17,458 3 5 +89 4 2	6,827 11 5 +44 15 0	5,790 14 10 +34 8 0	7,729 15 7 +45 1 3	14,725 12 5 +46 12 5	33,300 3 4 +90 4 8	10,006 0 6 +48 7 1	96,228 2 1 ...
Grand Total of Expenditure ..	18,551 3 10 +89 4 2	13,605 11 10 +44 15 0	11,295 1 6 +34 8 0	13,803 9 10 +45 1 3	21,678 8 0 +46 12 5	76,644 12 11 +90 4 8	21,170 14 3 +48 7 1	1,76,549 2 9 ...

A.—Pay of Mr. Bhukhan from 8th December 1889 to 28th February 1890 at Rs 80 per mensem.
B.—Travelling allowance of Mr Bhukhan for December 1889 and January and February 1890.
C.—Cost of stationery supplied by the Superintendent of Stationery, Bombay.

Comptroller's Office,

Bolarum,

The 21st October 1890.

B-92

H. FLANAGAN,

Head Assistant to Comptroller,

Hyderabad.

FORESTS.

Dr. *Cr.*

FORM No. 59.—*Account-current of the Forest Department, Hyderabad Assigned Districts, for the year* 1889-90.

	Rs	a.	p.	Rs.	a.	p.		Rs.	a.	p.	Rs	a.	p.
To Cash Balance				280	9	4	By 11.—Forests (Expenditure as per annual summary), Form No. 58	1,76,149	14	2			
„ IX.—Forests (Revenue as per annual summary), Form No. 58	4,40,540	12	11				„ *Forest Cash Remittances, Local*—						
„ Service funds	1,254	15	4				Remittances to treasuries	4,40,354	3	5			
Forest Cash Remittances, Local:—							Inter-divisional transfers	668	12	6			
Forest cheques drawn	1,72,556	3	6				Cancelled cheques				6,17,172	14	1
Inter-divisional transfers	668	12	6				By Advances recoverable	80,319	12	9			
				6,15,020	12	3	„ Suspense						
To Advances recoverable	81,646	1	11				„ Cash recoveries	225	10	7			
„ Suspense							„ Account-current (other Governments)	480	7	1			
„ Cash recoveries	225	10	7				„ Inter-departmental transfers	118	8	0	81,144	6	5
„ Account-current (other Governments)	1,428	9	6										
„ Inter-departmental transfers	10	0	0				„ Cash Balance				294	7	1
				83,310	6	0							
Total				6,98,611	11	7	Total				6,98,611	11	7

FORESTS.

Annual Form No. 60.—*Revenue received and outstandings on account of Revenue during* 1889-90.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realized during year.	Balance due to the Department at end of year.
			RS. a. p.	RS. a. p.	RS. a. p.	
Direction ...	Timber and other produce.	...	265 7 5	265 7 5	265 7 5	...
Ellichpur ...	Do.	...	1,64,619 7 6	1,64,619 7 6	1,64,619 7 6	...
Amraoti ...	Do.	...	68,181 5 8	68,181 5 8	68,181 5 8	...
Akola ...	Do.	...	47,369 13 11	47,369 13 11	47,369 13 11	...
Buldana ...	Do.	...	45,744 0 11	45,744 0 11	45,744 0 11	...
Basim ...	Do.	...	43,540 9 3	43,540 9 3	43,073 9 3	467 0 0
Wun ...	Do.	...	71,287 0 3	71,287 0 3	71,287 0 3	...
	Total ...	...	4,41,007 12 11	4,41,007 12 11	4,40,540 12 11	467 0 0

Annual Form No. 61.—*Outstandings and Liabilities on account of Contractors and Disbursers for* 1889-90.

Division.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (outstandings).	By Department (Liabilities).
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
Akola Division ...	...	12,091 5 2	12,091 5 2	1,160 5 1	11,507 6 9	12,667 11 10	576 6 8	...
Amraoti „ ...	...	6,407 5 8	6,407 5 8	1,814 5 1	5,696 10 7	7,510 15 8	1,103 10 0	...
Basim „ ...	...	13,662 9 1	13,662 9 1	438 12 4	13,818 2 1	14,256 14 5	594 5 4	...
Buldana „ ...	...	9,376 11 1	9,376 11 1	1,731 12 5	9,748 5 0	11,480 1 5	2,103 6 4	...
Direction „ ...	...	704 10 7	704 10 7	73 11 6	847 10 9	921 6 3	216 11 8	...
Ellichpur „ ...	...	29,108 3 5	29,108 3 5	2,755 1 9	28,168 15 8	30,924 1 5	1,815 14 0	...
Wun „ ...	...	10,295 4 11	10,295 4 11	97 1 0	10,532 9 11	10,629 10 11	334 6 0	...
Total ...	...	81,646 1 11	81,646 1 11	8,071 1 2	80,319 12 9	88,390 13 11	6,744 12 0	..

Annual Form No. 62.—*Financial results of the year* 1889-90.

Division.	Timber and other produce removed from the forests by Government agency.		Other revenue.		Formation, protection, and improvement of forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Direction ...	...	...	265	13,826	4,725	265	18,551
Ellichpur ...	...	...	1,64,620	43,604	32,441	1,64,620	76,045
Amraoti ...	...	...	68,181	8,405	2,890	68,181	11,295
Akola ...	...	...	47,370	10,603	3,003	47,370	13,606
Buldana ...	...	...	45,744	11,162	2,642	45,744	13,804
Basim ...	...	...	43,074	16,165	5,513	43,074	21,678
Wun ...	...	...	71,287	15,646	5,525	71,287	21,171
Total ...	...	...	4,40,541	1,19,411	56,739	4,40,541	1,76,150

Appendix A.—*Cattle-Grazing in the Demarcated State-Forests and District Reserved and Unreserved Forests during the year* 1889-90.

Division.	Districts, &c.	Year.	Camels.	Buffaloes.	Cows and bullocks.	Sheep and goats.	Total.	Revenue.
		Demarcated State-Forests.						
Ellichpur ...		1888-89 ...	...	...	...	...	...	...
		1889-90 ...	...	...	...	...	...	...
Amraoti ..		1888-89 ...	...	...	...	...	...	...
		1889-90 ...	...	...	...	...	...	...
Akola ...		1888-89 ...	...	465	7,189	...	7,654	2,030
		1889-90 ..	...	497	2,804	501	3,802	758
Buldana ...		1888-89 ..	...	1,008	13,095	...	14,103	3,819
		1889-90 ...	...	735	10,673	...	11,408	3,040
Basim ...		1888-89 ...	...	304	6,415	...	6,719	1,755
		1889-90 ...	...	260	3,063	...	3,323	903
Wun ...		1888-89 ...	..	183	7,354	...	7,537	1,930
		1889-90 ...	...	...	...	...	...	...
	Total ...	1888-89 ...	...	1,960	34,053	...	36,013	9,534
		1889-90 ...	...	1,492	16,540	501	18,533	4,701
	District Reserves only—	*District Reserved and Unreserved Forests.*						
	Bairam grazing tract, Ellichpur Taluk	1888-89 ...	...	1,480	9,156	2,964	a 13,600	a 3,019
		1889-90 ...	1	1,477	9,054	3,069	b 13,601	
	Woods in Ellichpur and Daryapur Taluk	1888-89 ...	...	2,461	7,904	...	a 10,365	b 2,616
		1889-90 ...	...	1,824	5,779	...	b 7,603	
	District Unreserves only—							
Ellichpur ...	Melghat, Ellichpur and Betul (Central Provinces) ...	1888-89 ...	5	6,125	25,068	3,771	a 34,969	
		1889-90 ...	..	5,820	21,199	4,047	b 31,066	
	Ellichpur and Daraypur of Ellichpur ...	1888-89 ...	39	6,330	40,986	30,511	a 77,866	a 10,159
		1889-90 ...	16	6,333	37,953	31,748	b 76,050	b 9,454
	Akot and Jalgaon of Akola ...	1888-89 ...	....	3,248	31,062	6,262	a 40,572	
		1889-90 ...	...	3,014	33,296	6,143	b 42,453	
	Total ...	1888-89 ..	44	19,644	114,176	43,508	177,372	13,178
		1889-90 ...	17	18,468	107,279	45,007	170,771	12,070
Amraoti ...		1888-89 ...	1	46,852	120,644	58,249	219,746	24,798
		1889-90 ...	4	30,537	116,866	64,323	211,730	26,579
Akola ...		1888-89 ...	...	16,130	93,926	35,555	145,611	20,521
		1889-90 ...	...	14,312	92,785	31,585	138,682	21,142
Buldana ...		1888-89 ...	7	18,435	116,931	84,616	219,989	23,136
		1889-90 ...	...	19,687	126,703	100,106	246,496	23,767
Basim ...		1888-89 ...	...	15,131	109,024	29,910	154,065	18,417
		1889-90 ...	1	17,652	141,379	32,603	191,635	22,897
Wun ..		1888-89 ...	...	59,188	329,383	90,249	478,820	61,610
		1889-90 ...	...	54,336	310,698	91,416	456,450	58,136
	Total ...	1888-89 ...	52	169,380	884,084	342,087	1,395,603	161,660
		1889-90 ...	52	154,992	895,710	365,040	1,415,764	164,591
		Abstract.						
	Demarcated State Forests ...	1888-89 ...	...	1,960	34,053	...	36,013	9,534
		1889-90 ...	...	1,492	16,540	501	18,533	4,701
	District Reserved and Unreserved Forests... ...	1888-89 ...	52	169,380	884,084	342,087	1,395,603	161,660
		1889-90 ...	22	154,992	895,710	365,040	14,15,764	164,591
	All Forests...	1888-89 ...	52	171,340	918,137	342,087	1,431,616	171,194
		1889-90 ...	22	156,484	912,250	365,541	1,434,297	169,292

APPENDIX B.

Proposal to merge the unoccupied Government Lands and existing State-Forests situated on the Ghats of Buldana, Basim and Akola into a single State-Forest (Class A under the new Forest Law) combining the Purposes of a Timber and Fuel Reserve with the Requirements of Pasture.

South of the line of railway which leads from Malkapur to Murtazapur, we find nearly a fourth part of the Province of Berar dependent,* in respect of its supplies of timber, fuel, grass (for thatching and fodder purposes), and other forest produce, on the narrow belt of broken hilly country which divides the valley of the Poorna to the north from the basin of the Peinganga river to the south.

*At least in the near future.

The configuration of the ground, and a miserably bad soil, have saved much of this land from being broken up under the plough, and some 350 square miles of fairly continuous waste still stretch from the boundary of the Province, west of Buldana Station, as far east as the diminutive State-Forest of Wanoja, north of Mangrul.

Formerly, this belt of Ghat forest was much more considerable, embracing until a comparatively recent period a thousand square miles of country. But cultivation has gradually extended itself, and compact areas of forest are now confined to the narrow limits represented by the main ranges of hills and their off-shoots—a sterile rocky country poorly clad with Teak, Anjan, Dowra, Pallás, Salai, and other species of uniformly stunted growth and misshapen form—the result of generations of pollarding, lopping, mutilation and fires, added to the primary cause of an unproductive soil.

2. Occupying perhaps the most barren localities in all this barren region we find the detached State-Forests of

			Square miles.
1.	Amdari		21
2.	Gerumatergaon		72
3.	Mandwa		9
4.	Ghatbori	Wagdeo	10
5.		Rajghar	13
6.		Bachwadi	10
7.		Andharsaongi	4
8.	Medsi		2
9.	Chandus		5
10.	Rui	Rui	10
11.		Wanoja	
		Total	156

The remaining 194 square miles of waste comprise:—

* (a) The South-Akola Coppice Reserves (constituted under Rule IV of the Supplementary Berar Forest Rules of 1874)... ... ... 64 square miles;

(b) Unreserved Forests in the Akola, Buldana and Basim Districts ... 130 square miles.

* Since writing the present memorandum, this area has been recommended for inclusion in State Forests of Class A (Timber Reserves) under the new Forest Law.

3. If the above 156 square miles of Demarcated State-Forests were sufficient for the supply of the people in this part of South and West Berar with timber, firewood, and high grass, I would not mind much what became of the rest, provided always that provision existed for the grazing requirements of the village cattle. I will go further and say that if the former area gave the smallest promise of being at all equal to that supply after a long preliminary period † of closure to fires and cattle, rest from fellings, and systematic re-stocking operations, I should confine my present proposals to the management of the outside forests on a plan which would merely ensure a sufficient supply of forest produce in the interval.

† Say 40 years.

Unfortunately, my inspection of eight of these State-Forests induces me to believe that the area in question will not only not suffice, but cannot by any human agency be made to suffice hereafter for the requirements of the people.

They would not suffice under totally different conditions of soil; and I have already remarked that the soil is of the very worst—so miserably poor in fact that the improvement of the stock beyond certain narrow limits is hopeless. In these circumstances, it appears to me advisable to make suggestions which, while admitting of the entire area of these

Ghat forests and waste lands being set aside for the primary purpose of supplying the people with timber, firewood, and grass, will at the same time make adequate provision in the matter of grazing, and such other popular practices as can be here correctly regarded as obstacles to forest restoration.

Rather than be given the option of closing for an indefinite period the 156 square miles of existing State-Forests in this region, and of subjecting that area to an intense form of sylvicultural treatment for which the miserable character of the soil renders it in great part unfit, I would prefer the alternative of placing the whole 350 square miles under a more relaxed system of management, such as will in no way curtail the existing privileges of the people. Because it is evident to me that, however much these forests may suffer on the whole from a form of treatment which is not in all respects favourable to tree growth, there is more to be gained in this way than by the rigorous protection of a smaller area possessing few of the requisites that conduce to a productive timber estate.

4. I accordingly venture to suggest that all the existing State-Forests in this zone should be merged, along with the South-Akola "Coppice Reserves," and unoccupied Government numbers, into one class of State Reserve to be administered as follows (assuming, for purposes of illustration, that the total area is 400 square miles) :—

(*a*) The total area to be divided into 8, 10, 12, or as many Circles as may be considered desirable in the interests of the public. For purposes of easy illustration, let us say 10 Circles of 40 square miles each.

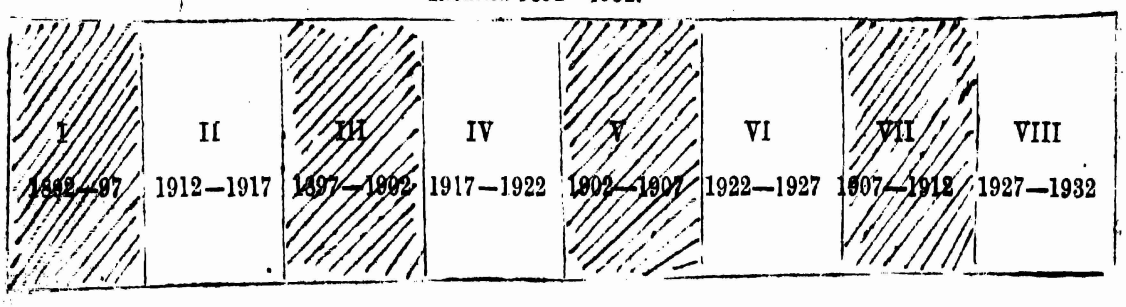
(*b*) Each Circle to be completely worked over for timber once in every 40 years, or such lesser period as may suffice for the production of coppice standards of Teak having a middle girth of two feet only.

(*c*) Each Circle to be divided into Blocks of approximately equal area (for convenience as regards grazing), but not to be too small for purposes of easy protection and control. In the present case let us say 8 Blocks of 5 square miles each.

(*d*) The diagram* and plan below illustrate the annual course to be then followed in the case of each Circle (assuming the Working-Plan to come into operation in 1892) :—

* A great regularity has been expressly given to the example before us. The circumstance of the Blocks being very irregularly constituted would in no way affect the practical application of the Plan.

Rotation 1892—1932.



1892—1897 ... Block I is under work for timber and firewood, the areas cut over each year being selected so as to give roughly equal annual outturns. Efforts are at the same time made to increase the stock contained in this Block by artificial means. Cattle are excluded from this block.

Blocks II to VIII are open to cattle grazing.

The whole Circle is fire-protected. Block I is open for the cutting of grass on prominent ridges, and in all localities unsuited to the growth of useful timber.

1897—1902 ... Block III undergoes the same treatment as Block I in above.

Blocks II, IV to VIII are open to cattle grazing.

The whole Circle is fire-protected.

Blocks I and III are open for the cutting of grass on prominent ridges, and in all localities considered unsuited to the growth of useful timber.

1902—1907 ...	Block V undergoes the same treatment as Block III in above. Blocks II, IV, VI to VIII are open to cattle grazing. The whole Circle is fire-protected. Blocks I, III, V are open to the cutting of grass as above.
1907—1912 ...	Block VII undergoes the same treatment as Block V in above. Blocks I, II, IV, VI, VIII are open to grazing. The whole Circle is fire-protected. Blocks III, V, VII are open to the cutting of grass as above.
1912—1917 ...	Block II undergoes the same treatment as Block VII in above. Blocks I, III, IV, VI, VIII are open to grazing. Blocks II, V, VII are open to the cutting of grass as above. The whole Circle is fire-protected.
1917—1922 ...	Block IV undergoes the same treatment as Block II in above. Blocks I, III, V, VI, VIII are open to grazing. Blocks II, IV, VII are open to the cutting of grass as above. The whole Circle is fire-protected.
1922—1927 ...	Block VI undergoes the same treatment as Block IV in above. Blocks I, III, V, VII, VIII are open to grazing. Blocks II, IV, VI are open to the cutting of grass as above. The whole Circle is fire-protected.
1927—1932 ...	Block VIII undergoes the same treatment as Block VI in above. Blocks I, II, III, V, VII are open to grazing. Blocks IV, VI, VIII are open to the cutting of grass as above. The whole Circle is fire-protected.

FORESTS.

APPENDIX C (1)—*Statement of Expenditure incurred in the Forest Department on Roads in the Ellichpur Division during the years 1874-75 to 1889-90 inclusive.*

Name of Reserve.	Name of roads.	No. of miles.	1874-75. Construction.	1874-75. Repairs.	1875-76. Construction.	1875-76. Repairs.	1876-77. Construction.	1876-77. Repairs.	1877-78. Construction.	1877-78. Repairs.	1878-79. Construction.	1878-79. Repairs.	1879-80. Construction.	1879-80. Repairs.	1880-81. Construction.	1880-81. Repairs.	1881-82. Construction.	1881-82. Repairs.	1882-83. Construction.	1882-83. Repairs.	1883-84. Construction.	1883-84. Repairs.	1884-85. Construction.	1884-85. Repairs.	1885-86. Construction.	1885-86. Repairs.	1886-87. Construction.	1886-87. Repairs.	1887-88. Construction.	1887-88. Repairs.	1888-89. Construction.	1888-89. Repairs.	1889-90. Construction.	1889-90. Repairs.	Total. Construction.	Total. Repairs.	Remarks.
Bairagarh.	Sembadoh-Biba road ...	37	...	...	...	...	...	...	...	...	...	...	3,260	...	4,921	...	538	1,252	1,527	73	2,336	854	...	803	...	648	...	547	...	469	...	528	...	393	12,572	5,867	
Do.	Do. Makla road ...	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	601	...	3,664	61	1,122	...	...	96	...	324	...	140	...	111	...	63	...	73	5,407	868	
Do.	Do. Chikalda road ...	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,740	...	10,229	...	7,060	...	...	4,485	...	297	...	244	...	244	19,029	5,270	
Do.	Raipur-Patia road ...	18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35	...	...	...	48	...	...	10,502	382	...	198	...	221	10,502	884	
Do.	Makla-Biba road ...	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6,023	...	8,977	301	...	73	15,000	673	
Do.	Raipur Jarida road ...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,471	...	7,163	04	8,634	204	
Do.	Pili Kolkas road ...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	71	...	63	...	...	...	95	...	65	...	79	...	71	...	66	...	516	
Do.	Chowrakund-Butram road ...	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,638	...	3,638	...	
Gugamal.	Chikalda-Bandum road ...	36	...	...	...	...	...	...	...	...	...	...	...	...	3,510	...	6,967	46	1,758	...	...	1,209	...	254	...	458	...	380	...	480	...	239	...	238	12,212	*3,314	
Do.	Kolkas Rangrao Churni road	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,705	...	...	1,319	...	130	...	178	...	117	...	136	3,705	1,880	
Do.	Repairs to Karas road ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13	...	13	
Melghat Unreserved Forests.	Repairs to Karas road ...	...	...	...	...	...	...	439	...	32	...	144	...	443	...	...	...	...	...	10	...	117	...	48	...	...	...	21	...	236	...	400	...	330	...	2,280	
Do.	Motha road ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*2,000	...	...	...	...	...	...	...	*2,000	...	*Gran by Forest Department.
	Total ...	185	...	...	...	...	...	439	...	32	...	144	3,250	443	8,431	...	8,106	1,298	6,947	215	5,198	2,278	13,934	1,211	7,060	2,832	2,000	6,068	16,525	2,292	10,448	2,161	10,801	2,290	92,709	21,763	

FOR

APPENDIX C (2).—*Statement showing the Expenditure on Buildings in the*

Name of Range.	Name and description of building.	1874-75. Construction.	1874-75. Repairs.	1875-76. Construction.	1875-76. Repairs.	1876-77. Construction.	1876-77. Repairs.	1877-78. Construction.	1877-78. Repairs.	1878-79. Construction.	1878-79. Repairs.	1879-80. Construction.	1879-80. Repairs.	1880-81. Construction.	1880-81. Repairs.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Bairagarh Reserve.	TANNAS.														
	Makla	...	...	95 6 0	...	...	3 4 0	...	6 9 2	...	...	...	...	...	...
	Sirushan	...	...	53 14 0	...	...	...	24 7 0	...	...	...	...	...	...	...
	Raipur	...	...	73 9 0	8 0 0	86 0 3	...	...	...	...	...	...	5 0 0	...	...
	Pili	...	...	...	...	...	...	...	10 2 9	...	...	...	...	...	...
	Abapur	...	...	42 2 0	...	...	...	...	5 10 9	...	...	...	...	...	11 6 0
	Awagarh	...	...	...	...	50 0 0	...	...	...	...	...	...	5 0 0	...	
	Harisal	...	...	...	...	71 12 0	...	...	...	...	...	...	4 6 0	...	
	Hatru	...	...	...	...	50 0 0	...	...	...	...	...	...	5 0 0	...	
	Rangobeli	...	...	...	...	57 10 0	...	...	...	...	...	...	4 6 0	...	
	Patia	...	...	...	...	56 0 0	...	...	...	...	...	...	4 6 0	...	
	Biba	...	...	...	...	67 2 8	...	...	...	...	...	...	5 0 0	...	
	Somitha	...	...	...	...	56 5 2	...	...	...	...	...	...	5 0 0	...	
	Jambu	...	...	...	...	40 10 0	...	...	...	...	...	7 8 0	4 6 0	...	
	Ambadoh	...	...	...	...	...	...	...	...	...	...	...	...	...	Repairs to 9 Tannas Rs. 40 (no details).
	Shed for tools at Raipur	...	...	...	...	...	...	...	...	...	...	...	...	24 8 0	
	Sembadoh	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Cattle pound at Sembadoh	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Kolkaz	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Chowrakund ...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Borda	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Total ...	...	...	263 9 0	8 0 0	485 8 1	3 4 0	24 7 0	22 6 8	...	...	7 8 0	42 8 0	24 8 0	51 6 0
	REST HOUSES.														
	Makla rest house ...	...	27 0 0	...	...	...	...	...	67 1 6	...	1 3 2	...	112 12 0	...	...
	Hatru do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kolkaz do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Makla observatory ...	...	...	...	...	...	...	307 15 3	...	141 5 4	...	...	...	...	...
	Raipur rest house ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tarida do. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	27 0 0	...	...	...	...	307 15 3	67 1 6	141 5 4	1 3 2	...	112 12 0	...	...
	Grand Total of Bairagarh Reserve.	...	27 0 0	263 9 0	8 0 0	485 8 1	3 4 0	332 6 3	89 8 2	141 5 4	1 3 2	7 8 0	155 4 0	24 8 0	51 6 0
Gugamal Reserve.	TANNAS.														
	Dakna	...	...	...	...	...	...	10 0 0	...	...	2 0 0	...	...	...	...
	Gurgipati	...	...	...	...	...	...	10 0 0	...	...	2 0 0	...	...	...	...
	Darkot	...	...	...	...	...	...	10 0 0	...	...	...	...	...	5 0 0	...
	Patulda	...	...	...	...	...	...	10 0 0	...	...	2 0 0	5 1 0	...	...	...
	Tarubanda	...	...	...	...	...	...	6 0 0	...	...	2 0 0	...	...	...	...
	Khatkale	...	...	...	...	...	...	...	...	7 0 0	...	...	...	...	...
	Modra	...	...	...	...	...	...	...	...	...	...	5 0 0	...	...	...
	Pirkheda	...	...	...	...	...	...	...	...	...	...	3 0 0	...	...	...
	Koha	...	...	...	...	...	...	...	...	...	...	...	...	8 0 0	...
	Chiladari	...	...	...	...	...	...	...	...	...	...	...	...	10 0 0	...
	Bairat	...	...	...	...	...	...	...	...	...	...	...	...	4 0 0	...
	Assalwara	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dollar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bari	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Store house at Assalwara	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Do. Bairat ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangrao Churni ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pastalai	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Arao	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	...	...	...	...	...	46 0 0	...	7 0 0	8 0 0	13 1 0	...	27 0 0	...
	REST HOUSE.														
	Dakna rest house ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangrao Churni ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Grand Total of Gugamal Reserve.	...	...	...	...	...	...	46 0 0	...	7 0 0	8 0 0	13 1 0	...	27 0 0	...

ESTS.

Ellichpur Division from 1874-75 *up to the year* 1889-90.

1881-82.		1882-83.		1883-84.		1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.		Total expenditure.	
Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.
Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
...	12 4 3	...	4 0 0	...	4 0 0	...	...	...	4 0 0	...	4 0 0	...	4 0 0	...	5 0 0	...	5 0 0	95 0 0	52 1 3
...	5 0 0	...	4 0 0	...	4 0 0	...	3 15 0	...	4 0 0	...	4 2 0	...	4 0 0	...	5 1 0	...	4 11 0	77 5 0	38 13 0
...	5 0 0	...	4 0 0	...	4 6 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	50 0 0	4 0 0	...	3 15 0	159 9 3	41 15 0
...	14 14 6	...	6 9 0	...	4 0 0	...	...	50 0 0	...	...	3 14 0	...	4 0 0	...	4 15 6	...	3 15 0	50 0 0	60 6 9
...	5 0 0	...	...	...	3 15 0	...	...	...	...	...	...	...	...	...	...	...	...	42 2 0	25 15 9
...	13 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	3 15 0	...	3 10 0	...	4 0 0	...	4 0 0	50 0 0	49 9 0
...	5 0 0	...	4 0 0	...	4 0 0	...	3 15 0	...	3 15 0	...	3 15 0	...	4 0 0	...	4 0 0	...	4 2 0	71 12 0	41 5 0
...	5 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	50 0 0	42 0 0
...	5 0 0	...	4 0 0	...	4 0 0	...	22 15 0	...	3 15 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 2 0	57 10 0	60 6 0
...	5 0 0	...	4 0 0	...	4 0 0	...	3 15 0	...	3 15 0	...	3 15 0	...	4 0 0	...	4 0 0	...	5 1 0	56 0 0	42 4 0
...	5 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	3 14 0	...	4 0 0	...	4 0 0	67 2 8	41 14 0
...	5 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	3 10 0	...	4 0 0	...	4 0 0	56 5 2	41 10 0
...	5 0 0	...	4 0 0	...	4 0 0	...	...	...	...	...	...	...	...	...	...	...	...	40 10 0	17 6 0
...	5 0 0	...	2 0 0	...	3 15 0	...	...	...	4 0 0	...	3 2 0	50	3 8 0	...	5 0 0	...	4 14 0	57 8 0	31 7 0
...	...	...	3 15 0	...	4 0 0	...	4 0 6	...	...	...	12 3 0	...	...	...	...	...	...	24 8 0	24 2 6
...	5 0 0	...	3 15 0	666	3 15 0	...	4 11 0	...	4 0 0	...	13 0 0	...	51 2 0	...	...	...	...	666 0 0	85 11 0
...	...	...	...	...	...	...	...	50 0 0	...	...	...	...	...	...	4 14 0	...	7 0 6	50 0 0	11 14 6
...	4 15 6	...	...	...	3 15 0	...	...	...	...	50 0 0	...	...	4 0 0	...	4 15 6	...	2 4 0	50 0 0	20 2 0
...	5 0 0	...	4 0 0	...	4 0 0	...	3 15 0	...	3 15 0	...	3 15 0	...	4 0 0	...	4 0 0	50 0 0	...	50 0 0	32 13 0
...	5 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	4 0 0	...	37 0 0
...	115 2 3	...	68 7 0	666	75 12 0	...	71 6 6	100 0 0	55 12 0	50 0 0	80 1 0	50	109 12 0	50 0 0	69 14 0	50 0 0	65 0 6	1,771 8 1	798 11 11
...	32 5 0	...	127 13 0	...	43 7 0	...	15 6 0	...	26 3 6	...	22 10 0	...	248 15 9	...	4 14 6	...	12 8 6	...	742 3 11
...	...	...	...	...	...	...	...	...	...	...	...	100	...	...	30 0 0	...	9 6 0	100 0 0	39 6 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,550 0 0	...	...	35 15 0	1,550 0 0	35 15 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	440 4 7	40 0 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,550 0 0	...	1,550 0 0	18 0 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,550 0 0	...	1,550 0 0	...
...	32 5 0	...	127 13 0	...	43 7 0	...	15 6 0	...	26 3 6	...	22 10 0	100	248 15 9	1,550 0 0	34 14 6	3,100 0 0	75 13 6	5,199 4 7	875 8 11
...	147 7 3	...	196 4 0	666	119 8 0	...	86 12 6	100 0 0	81 15 6	50 0 0	102 11 0	150	358 11 9	1,600 10 0	104 12 6	3,150 0 0	140 14 0	6,970 12 8	1,674 4 10
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 10 0	...	3 12 0	60 0 0	19 6 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10 0 0	2 0 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15 0 0	...
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 6 0	...	4 0 0	65 1 0	19 6 0
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 4 6	...	4 8 0	56 0 0	19 12 6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3 0 0	...
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	3 15 0	...	5 12 0	...	3 12 0	58 0 0	17 7 0
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 12 0	...	4 0 0	60 0 0	17 12 0
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	1 8 0	...	4 0 0	...	3 6 0	54 0 0	12 14 0
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 9 0	...	4 2 0	50 0 0	17 11 0
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 12 0	...	3 15 0	50 0 0	17 11 0
...	...	...	...	...	...	...	...	50 0 0	...	...	4 0 0	...	4 0 0	...	5 12 0	...	3 15 0	50 0 0	17 11 0
7 8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7 8 0	...
17 8 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17 8 0	...
...	...	8 1 0	...	...	...	...	...	...	...	...	...	...	...	48 5 0	...	...	4 8 0	56 6 0	4 8 0
...	...	...	...	...	...	...	...	...	...	...	...	...	2 8 0	...	...	...	...	...	2 8 0
...	...	...	...	...	...	...	...	...	...	...	...	...	4 0 0	...	...	...	...	...	4 0 0
25 0 0	...	8 1 0	...	...	...	...	...	450 0 0	...	...	36 0 0	...	39 15 0	48 5 0	48 13 6	...	39 14 0	624 7 0	172 10 6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,550 0 0	...	...	51 11 0	1,550 0 0	51 11 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,550 0 0	...	1,550 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,550 0 0	...	1,550 0 0	51 11 0	3,100 0 0	51 11 0
25 0 0	...	8 1 0	...	...	...	...	...	450 0 0	...	...	36 0 0	...	39 15 0	1,598 5 0	48 13 6	1,550 0 0	91 9 0	3,724 7 0	224 5 6

FOR

APPENDIX C-(2).—*Statement showing the Expenditure on Buildings in the*

Name of Range.	Name and description of Building.	1874-75.		1875-76.		1876-77.		1877-78.		1878-79.		1879-80.		1880-81.	
		Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.
Chikalda Reserve.	REST HOUSES.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Conservator's Bungalow	...	1,219 6 11	...	83 7 10	...	452 3 0	...	34 11 4	...	914 13 3	...	668 6 10	...	238 10 0
	Peachgrove ...	...	408 10 3	...	2 13 0	...	1 4 0	...	...	...	19 9 6	...	21 13 10	...	0 10 0
	Elephant's catah hut ...	...	...	...	...	...	...	...	...	...	...	...	...	3 12 0	...
	Shed for elephant ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Grand Total of Chikalda Reserve.	...	1,628 1 2	...	80 4 0	...	453 7 0	...	34 11 4	...	934 6 9	...	690 4 8	3 12 0	239 4 0
Melghat Unreserved Forests.	TANNAS.														
	Nimkhera ...	35 8 0	...	...	6 0 0	...	3 1 0	...	...	...	...	...	...	...	...
	Jhiri ...	23 0 0	...	29 4 0	...	...	...	...	4 0 0	...	...	...	10 0 0	25 0 0	...
	Gowlkhera ...	32 0 0	...	...	...	...	7 0 0	...	...	...	...	...	...	...	...
	Dhamangaon ...	73 5 6	...	88 6 3	3 8 0	...	5 9 0	...	13 0 0	...	7 8 0	...	10 2 0	...	14 8 0
	Saderpur ...	...	...	10 4 0	...	20 13 0	...	...	...	...	...	...	...	...	...
	Boralla ...	...	...	29 0 0	...	...	...	20 10 6	...	...	13 4 0	...	5 0 0	...	4 0 0
	Deogaon ...	...	...	22 7 4	...	...	...	...	4 8 0	...	5 0 0	...	5 0 0	...	5 8 0
	Khurpi ...	...	...	17 4 0	...	...	...	...	...	...	...	28 0 0	...	...	3 0 0
	Jamod ...	...	...	...	5 0 0	10 2 0	0 6 0	...	...	...	...	...	...	...	...
	Kasod ...	...	...	17 14 0	2 2 0	...	2 0 0	...	...	...	29 8 0	...	2 6 0	19 0 0	...
	Wagdoh ...	...	...	29 10 0	...	...	2 6 0	36 10 9	...	...	...	...	23 1 0	...	17 0 0
	Bhairum ...	...	...	84 6 6	...	3 8 0	...	57 14 3	2 0 0	...	11 0 0	...	9 0 0	...	12 0 0
	Wagholi ...	...	...	30 7 0	...	...	0 12 0	...	3 15 0	...	3 14 6	...	10 0 0	...	15 0 0
	Kalamkhar ...	...	...	30 1 6	...	...	...	29 0 0	8 0 0	...	5 0 0	...	6 0 0	...	...
	Sonalla ...	...	...	...	...	31 14 0	...	...	...	...	...	...	...	...	...
	Khirkheda ...	...	...	...	...	...	...	20 0 0	...	...	...	...	5 0 0	...	7 0 0
	Bezali ...	...	...	...	...	...	...	27 12 0	...	...	5 0 0	...	4 0 0	...	2 0 0
	Ambadi ...	...	...	...	...	...	...	38 15 3	...	...	4 0 0	...	10 0 0	...	10 8 0
	Chinchona ...	...	...	...	...	...	...	35 7 0	...	...	7 4 0	...	5 0 0	...	12 0 0
	Malhara ...	...	...	...	...	...	...	43 13 6	...	...	6 0 0	...	9 0 0	...	5 0 0
	Kamod ...	...	...	...	...	...	...	21 0 0	...	...	6 0 0	18 0 0	...	...	5 0 0
	Kajaldoh ...	...	...	...	...	...	...	...	...	10 0 0	4 0 0	...	...	...	2 0 0
	Hut for Malhara peon...	...	...	...	...	...	...	...	...	...	...	...	...	1 0 0	...
	Suserda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pingli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Saolikheda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hut at Ellichpur Cantonment wood bazaar	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Popatkhera...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	163 13 0	...	333 0 7	16 10 0	66 5 0	21 2 0	331 3 3	35 7 0	10 0 0	107 6 6	46 0 0	113 9 0	45 0 0	114 8 0
	OPEN BLOCKS.														
	3 Nakas, names not given.	26 10 0	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jambu ...	...	...	9 0 0	...	...	...	...	...	...	...	...	...	...	...
	Tarubanda ...	...	...	4 4 0	...	...	...	...	...	...	...	...	...	...	...
	Borekhera ...	...	...	6 0 0	...	...	...	...	...	...	...	...	...	...	...
	Chakarda ...	...	...	...	...	10 0 0	...	...	...	...	...	...	...	...	...
	Churni ...	...	...	...	...	5 0 0	...	...	...	...	...	...	...	...	...
	Salona ...	...	...	...	...	7 0 0	...	...	...	...	...	...	...	...	...
	Darkat ...	...	...	...	...	6 0 0	...	...	...	...	...	...	...	...	...
	Kotia ...	...	...	...	...	8 0 0	...	...	...	...	...	...	...	...	...
	Gurguti ...	...	...	...	...	11 0 0	...	...	...	...	...	...	...	...	...
	Total ...	26 10 0	...	19 4 0	...	47 0 0	...	...	...	...	...	...	...	...	...
	Grand Total of Melghat Unreserved Forests.	190 7 6	...	352 4 7	16 10 0	113 5 0	21 2 0	331 3 3	35 7 0	10 0 0	107 6 6	46 0 0	113 9 0	45 0 0	114 8 0
	Grand Total of all Expenditure.	190 7 6	1,655 1 2	615 13 7	110 14 10	598 13 1	477 13 0	709 9 6	159 10 6	158 5 4	1,051 0 5	66 9 0	959 1. 8	100 4 0	403 2 0

ESTS.

Ellichpur Division from 1874-75 *up to the year* 1889-90.

( )

1881-82.		1882-83.		1883-84.		1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.		Total Expenditure.	
Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.	Construction.	Repairs.
Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs.	Rs. a. p.	R	Rs. a. p.	Rs. a. p.	Rs. a. p.	R	Rs. a. p.	Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p
...	207 15 3	...	81 10 5	...	834 6 3	...	2 6 0	...	182 8 0	...	125 6 6	...	1,565 9 3	...	611 9 0	...	260 3 6	...	7,483 5
...	31 0 0	...	286 15 0	...	2 8 0	...	133 0 0	...	...	...	...	...	...	...	71 5 6	282 0 0	97 11 0	282 0 0	1,077 4 1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8 12 0	...
...	...	33 3 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33 3 0	...
...	238 15 3	33 3 0	368 9 5	...	836 14 3	...	135 6 0	...	182 8 0	...	125 6 6	...	1,565 9 3	...	682 14 6	282 0 0	357 14 6	318 15 0	8,560 9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35 8 0	9 1 0
...	9 8 0	...	6 0 0	...	5 0 0	...	8 13 0	...	10 0 0	...	5 0 0	...	6 0 0	...	12 4 0	...	15 0 0	77 4 0	91 9 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32 0 0	7 0 0
...	16 0 0	...	2 0 0	...	4 4 3	...	5 8 0	...	7 12 6	...	7 0 0	...	15 0 0	...	23 7 6	...	22 0 0	161 11 9	157 3 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	81 1 0	...
...	10 0 0	...	0 6 0	...	8 4 9	...	2 0 0	...	3 12 0	...	4 15 9	...	5 0 0	...	10 0 0	...	7 0 0	43 10 6	73 10 6
...	5 8 0	...	...	...	10 0 0	...	3 9 0	...	4 14 0	...	5 0 0	...	9 3 6	...	6 0 0	...	7 0 0	22 7 4	71 2 6
...	5 0 0	...	5 0 0	...	5 0 0	...	7 0 0	...	5 0 0	...	8 0 0	...	6 10 0	...	10 0 0	...	6 6 0	45 4 0	61 0 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10 2 0	5 6 0
...	12 0 0	...	11 0 0	...	10 12 0	...	5 0 0	...	8 0 0	...	10 0 0	...	9 0 0	259 15 0	11 0 0	...	10 1 3	206 13 0	122 13 0
...	13 0 0	...	15 0 0	...	15 0 0	...	12 0 0	...	13 4 9	...	5 0 0	...	9 13 6	...	14 8 0	...	12 6 0	66 4 9	152 7 3
...	9 0 0	...	7 0 0	...	6 11 0	...	23 0 6	...	5 0 0	...	5 15 0	...	14 0 0	...	12 4 0	...	14 2 0	85 12 9	131 0 6
...	10 0 0	...	10 0 0	...	5 0 0	...	5 0 0	...	13 7 0	...	3 0 0	...	6 0 0	...	7 4 0	...	7 0 0	30 7 0	103 4 6
...	5 0 0	...	5 15 0	...	10 0 0	...	10 0 0	...	8 0 0	...	8 3 0	...	3 9 0	...	19 8 9	...	10 0 0	59 1 6	99 3 9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31 14 0	...
...	6 13 0	...	4 0 0	...	10 0 0	...	8 0 0	...	6 0 0	...	6 0 0	...	10 0 0	...	11 0 0	...	10 0 0	20 0 0	82 13 0
...	10 0 0	...	10 8 0	...	10 0 0	...	6 0 0	...	3 0 0	...	5 0 0	...	6 0 0	...	12 0 0	...	12 8 0	27 12 0	85 11 0
...	5 0 0	...	8 0 0	...	9 8 0	...	9 8 0	...	7 8 0	...	8 0 0	...	5 0 0	...	10 10 0	...	9 12 0	38 15 3	97 6 0
...	12 3 0	...	8 0 0	...	16 0 0	...	5 8 0	...	3 0 0	...	5 0 0	...	9 8 0	...	9 5 0	...	7 12 0	35 7 0	100 8 6
287	...	...	...	...	2 2 0	...	...	...	4 0 0	...	5 0 0	...	17 0 0	103 8 0	10 0 0	414 8 0	...	848 13 6	58 2 0
...	15 10 0	...	3 0 0	...	3 0 0	...	...	...	2 0 0	...	...	...	...	...	...	...	...	39 0 0	34 10 0
19	...	...	7 0 0	...	10 0 0	...	5 0 0	...	4 0 0	...	6 0 0	...	8 0 0	...	5 0 0	...	6 0 0	29 0 0	57 0 0
...	...	2 0 0	...	...	2 0 0	...	5 0 0	...	...	...	...	...	...	...	...	...	...	3 0 0	7 0 0
10	...	...	...	...	5 0 0	...	3 4 0	...	5 0 0	...	5 0 0	...	5 4 0	10 0 0	...	...	10 0 0	20 0 0	33 8 0
...	...	...	...	...	...	...	...	52 0 0	...	...	5 2 0	...	8 0 0	...	14 14 0	...	10 15 0	52 0 0	37 15 0
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8 0 0	...	...	...	8 0 0
...	...	...	...	...	...	...	...	4 8 0	...	...	...	...	...	...	...	...	...	4 8 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3 0 0	...	3 0 0	...
316	144 10 0	2 0 0	102 13 0	...	147 10 0	...	124 2 6	56 8 0	113 10 3	...	107 3 9	...	153 0 0	373 7 0	207 1 9	417 8 0	176 9 9	2,160 13 4	1,685 7 6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26 10 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9 11 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4 4 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11 0 0	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	92 14 0	...
316	144 10 0	2 0 0	102 13 0	...	147 10 0	...	124 2 6	56 8 0	113 10 3	...	107 3 9	...	153 0 0	373 7 0	207 1 9	417 8 0	176 9 9	2,253 11 4	1,685 7 6
341	531 0 6	48 4 0	667 10 5	666	1,103 11 3	...	346 5 0	606 8 0	378 1 9	50	371 5 3	150	2,117 4 0	3,571 12 0	1,043 10 3	5,399 8 0	706 15 3	13,207 14 0	12,146 11 3

FORESTS.

Appendix C-(3)—*Statement showing Expenditure on Wells, Tanks, and Jhiras in the Ellichpur Division from 1874-75 to 1889-90.*

Name of Range.	Wells, Tanks, and Jhiras.	1874-75. Construction.	1874-75. Repairs.	1875-76. Construction.	1875-76. Repairs.	1876-77. Construction.	1876-77. Repairs.	1877-78. Construction.	1877-78. Repairs.	1878-79. Construction.	1878-79. Repairs.	1879-80. Construction.	1879-80. Repairs.	1880-81. Construction.	1880-81. Repairs.	1881-82. Construction.	1881-82. Repairs.	1882-83. Construction.	1882-83. Repairs.	1883-84. Construction.	1883-84. Repairs.	1884-85. Construction.	1884-85. Repairs.	1885-86. Construction.	1885-86. Repairs.	1886-87. Construction.	1886-87. Repairs.	1887-88. Construction.	1887-88. Repairs.	1888-89. Construction.	1888-89. Repairs.	1889-90. Construction.	1889-90. Repairs.	Total. Construction.	Total. Repairs.
	Wells.																																		
Bairagarh Reserve.	Makla 3		4					60 4 0					20 0 0																		1 2 0		6 0 0	64 4 0	27 2 0
	Rakia 1										12 14 0																						1 0 0		13 14 0
	Borkeri 1														4 8 0																		2 1 0		6 9 0
	Sembadoh 1																							424 1 2		472 12 10							1 6 6	396 14 0	1 6 6
	Rusyi 1																								4 14 0						0 9 0				5 7 0
	Surwar 1																								9 9 0						0 15 0		2 8 0		13 0 0
	Bhipoal 1																										8 4 0				0 12 0				9 0 0
	Bhosikera 1																										12 12 0								12 12 0
	Chorpi 1																										9 0 0				0 6 0		2 0 0		11 [illegible]
	Chaorakund 1									11 4 0																							1 2 0	11 4 0	1 [illegible] 0
	Hatru 1									17 4 0																							2 8 0	17 4 0	2 8 0
	Harisal 1									10 0 0																							1 2 0	10 0 0	1 2 0
	Jamboo 1									10 0 0																					0 15 0		4 14 0	10 0 0	5 13 0
	Raipur 1									19 12 0																				80 0 0	15 0 0	280 0 0	1 8 0	379 12 0	16 8 0
	Dömi 1																										5 13 0				0 15 0				6 12 0
	Khapra 1																										7 8 0				0 15 0		1 8 0		9 15 0
	Kumbi 1																										3 12 0				0 15 0		1 8 0		6 3 0
	Bodun 1																												80					80 0 0	
	Abapur 1																														1 8 0				1 8 0
	Jodkuwa 1																														0 12 0				0 12 0
	Khakra 1																														0 15 0				0 15 0
	Kolkas 1																															210 0 0		210 0 0	
	Total		4					60 4 0		68 4 0	12 14 0		20 0 0		4 8 0									424 1 2	14 7 0	472 12 10	47 1 0	80		80 0 0	25 11 0	490 0 0	29 1 6	1,679 6 0	153 10 6
	Sati Tank										297 9 2		69 5 11																						366 15 1
	Total		4					60 4 0		68 4 0	310 7 2		89 5 11		4 8 0									424 1 2	14 7 0	472 12 10	47 1 0	80		80 0 0	25 11 0	490 0 0	29 1 6	1,679 6 0	520 9 7
	Wells.																																		
Gugamal Reserve.	Patulda 1													10																	3 0 0			19 0 0	3 0 0
	Dakna 1																															270 0 0		270 0 0	
	Rangrao Churni 1																															201 6 0		201 6 0	
	Jhiras.																																		
	Dhargar 1														11 10 9																				11 10 9
	Tarubanda 1															10														105 8 0				10 0 0	
	Gugamal 1																													19 12 0				105 8 0	
	Chiladari 1																													2 0 0				19 12 0	
	Kollari 1																																	2 0 0	
	Total													10	11 10 9	10														127 4 0	3 0 0	471 6 0		618 10 0	14 10 9
	Wells.																																		
Melghat Unreserved Forests.	Wasali																	576 8 0																576 8 0	
	Bairum																					20											1 0 0	20 0 0	1 0 0
	Kajaldoh																					3												3 0 0	
	Ghiree																							90 0 0							7 0 0			90 0 0	7 0 0
	Jhiras.																																		
	Khatkali														6 12 0																				6 12 0
	Total														6 12 0			576 8 0				23		90 0 0							7 0 0		1 0 0	689 8 0	14 12 0
	Grand Total		4					60 4 0		68 4 0	310 7 2		89 5 11	10	22 14 9	10		576 8 0				23		514 1 2	14 7 0	472 12 10	47 1 0	80 0 0		207 4 0	35 11 0	961 6 0	30 1 6	2,987 8 6	550 0 4

FORESTS.

APPENDIX D.—*Statement of Expenditure incurred in the Public Works Department on roads and tanks in the Melghat, Ellichpur Division, during the year* 1874-75 *to* 1889-90 *inclusive.*

	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	Total.	Remarks.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Ellichpur-Pili road	1,636	10,562	39,308	33,678	64,631	88,139	48,848	34,283	3,904	931	...	...	...	a 12,564	...	...	3,38,484	*a* Expenditure on additional bridges.
Ghatang-Chikalda road	...	...	...	...	...	...	5,088	12,823	...	662	...	...	...	b 2,852	...	...	21,425	*b* Additions to dak and inspection bungalow.
Gugamal Forest road	.	...	...	...	...	...	...	...	...	...	...	23,613	93,307	78,196	...	c	1,95,116	*c* 22 miles completed and open to traffic from Akot to Asalwara. 16 miles under construction from Asalwara to Selu; expenditure not given by the Executive Engineer, Melghat Roads Sub-Division.
Pili-Kalamkhar road	...	...	...	...	...	...	3,500	...	...	...	...	...	...	...	...	..	3,500	
Melghat nicuts	...	...	...	...	...	...	...	...	3,088	6,971	14,139	9,168	4,521	3,738	d ...	...	41,625	*d* The Pateola anicut in progress.
Mardi Tank	...	...	...	...	...	...	...	...	...	6,770	16,233	12,048	2,165	...	...	...	37,216	
Total ...	1,636	10,562	39,308	33,678	64,631	88,139	57,436	47,106	6,992	15,334	30,372	44,829	99,993	97,350	...	...	6,37,366	

APPENDIX E.—*Meteorological Observations made in Reserved Forests.*

Month.	Mean of Hygrometer.								Mean of Thermometer.						Rain-fall.													
	Chikalda.				Makhla.				Chikalda.			Makhla.			Chikalda Reserve.			Bairagarh Reserve.										
															Chikalda			Makhla.						Raipur.			Pili.		
																		Tree gauge.			Ground gauge.								
	10 a. m.		4 p. m.		10 a. m.		4 p. m.		10 a. m.			10 a. m.																
	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry bulb.	Wet bulb.	Dry maximum.	Dry minimum.	Wet minimum.	Dry maximum.	Dry minimum.	Wet minimum.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.
April 1889 ...	85·1	62·2	90·4	63·9	89·9	67·2	94·4	68·5	86·3	72·4	57·0	92·2	73·7	62·0	1	26	4	...	65	2	.	72	2	...	37	2	1	...	2
May ,, ...	81·5	64·9	90·6	65·4	91·8	69·2	97·1	69·9	87·8	74·5	63·2	93·9	75·9	65·5	1	27	2	...	72	3		84	3	...	78	2	1	18	3
June ,,	73·5	71·9	80·7	69·5	79·1	71·2	83·5	72·2	76·8	69·2	66·2	83·3	72·0	68·4	7	77	16	12	28	13	13	27	13	8	67	12	9	48	13
July ,, ...	70·8	69·2	74·1	70·7	73·0	71·1	76·3	72·9	72·0	67·2	66·8	75·9	69·4	67·9	17	7	19	15	37	20	16	12	20	12	69	22	11	82	20
August ,, ...	67·8	64·0	69·3	68·5	70·0	69·3	71·3	72·0	68·6	64·0	63·8	72·1	67·9	67·1	31	64	30	33	24	29	33	42	24	22	5	30	32	99	28
September ,, ...	74·3	70·1	74·1	69·9	75·6	71·8	76·8	72·2	75·0	66·6	65·2	76·6	67·9	66·2	5	8	14	4	48	13	4	44	13	4	41	7	8	67	12
October ,, ...	72·2	63·6	72·7	64·3	73·4	66·9	76·0	68·0	75·9	62·7	57·5	74·3	63·0	59·4	4	8	8	2	27	8	2	57	8	1	88	5	2	45	6
November ,, ...	63·1	56·2	71·0	57·5	68·7	57·7	75·6	61·9	70·4	58·5	49·2	78·0	56·8	51·4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December ,, ...	69·2	53·8	73·3	55·5	64·5	54·8	75·7	59·7	72·4	56·6	47·3	69·6	56·3	49·0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January 1890 ...	67·9	53·5	72·7	56·5	67·3	55·8	77·1	59·8	68·6	56·2	47·2	79·0	56·3	48·9	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
February ,, ...	73·7	55·6	79·5	58·6	74·3	59·1	83·8	63·9	74·3	62·5	49·5	78·2	62·6	53·7	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...
March ,, ...	72·6	59·2	82·7	61·5	77·8	62·9	90·0	77·0	76·5	65·8	51·5	82·6	66·4	57·2	...	63	2	..	26	2	...	33	2	...	20	...	..	...	...
Total ...	877·0	744·2	931·1	761·8	905·4	777·0	977·6	818·0	904·6	776·2	684·4	955·7	788·1	716·7	68	80	95	69	27	90	71	71	90	51	5	4	67	59	84
Mean ...	73·1	62·0	77·6	63·5	75·4	64·7	81·5	68·2	75·4	64·7	57·0	79·6	65·7	59·7	...	...	...	...	...	...	...	...	...	...	...	84	...	...	...

Month.	Rain-fall.																				
	Bairagarh Reserve.						Gerumatergaon Reserve.			Ghatbori Reserve.			Penganga Reserve.			Kinwat Reserve.			Kolapur Reserve.		
	Patin.			Hatru.			Warwand.			Iswi.			Marwadi Khurd.			Sondabi.			Suna.		
	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.	Inches.	Cents.	No. of rainy days.
April 1889 ...	...	46	1	...	45	1	...	80	2	...	70	1	...	37	2	...	7	1	...	...	...
May " ...	...	49	2	1	16	5	...	15	1	...	...	...	...	32	1	...	...	...	...	...	...
June " ...	4	90	13	9	75	13	4	85	10	3	27	8	9	40	10	6	39	12	5	28	12
July " ...	12	26	18	15	92	20	5	65	14	10	99	20	11	20	20	16	4	25	23	2	20
August " ...	21	30	31	23	96	31	2	50	7	13	23	16	11	59	18	14	22	24	18	75	22
September " ...	2	56	9	5	73	12	1	70	6	10	2	7	7	55	11	7	6	16	8	43	12
October " ...	1	15	1	2	32	8	1	20	5	5	56	10	5	53	6	3	30	8	3	80	9
November " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
December " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
January 1890 ...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...
February " ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...
March " ...	...	15	2	...	21	2	...	...	...	...	...	...	...	...	...	...	21	1	...	...	...
Total ...	43	27	77	59	50	92	16	85	45	43	77	62	45	96	68	47	29	87	59	28	75

Extract from the Proceedings of the Resident at Hyderabad, No. 3524, dated Hyderabad Residency, the 30th October 1890.

Read—

Report on forest administration in the Hyderabad Assigned Districts during the year 1889-90.

ORDER.

The present report, though more punctual than that of last year, was received a fortnight after the due date; and every endeavour should be made to avoid this fault in future, as the Government of India has laid stress upon the importance of having this report submitted with punctuality.

2. *The Raipur-Makla working plan—paragraph 21 of the report*—According to the original plan, sanctioned in May 1887, it was proposed to work the Raipur-Makla forests on the principle of felling the well-grown first class teak timber at the rate of 1,000 trunks a year over a period of 25 years, at the end of which time it was hoped that a sufficient number of second class trees would have reached first class proportions. At the same time the jungle was to be cleared of unsound and mis-shapen trees by selling them as opportunity should offer. Inspection of the forest, however, led the Conservator to the conclusion mentioned in paragraph 25 of last year's report, that the existing working plan was founded on wrong premises, inasmuchas the existing second class teak was incapable of further sound development, and two-thirds of the entire stock then on the ground was either unsound or hopelessly mis-shapen. It was accordingly decided, in consultation with the Inspector General of Forests, to cancel the old plan and to have recourse to improvement fellings until a new plan to embrace the whole of the Melghat forests should be prepared. The outlines of the new plan have been submitted by the Conservator to the Inspector General, and it is hoped that, in the words of the report, "these important reserves will all be under systematic management from the 1st November 1891."

3. *Supervision—paragraph 29 of the report.*—With reference to the responsibility of the police and village officers in the matter of aiding the departmental staff to supervise the forests, it is feared that the police are hardly likely to be able to render much assistance. But a good deal might be expected from adequate co-operation on the part of the village officers; and, considering the immense importance that is attached to village offices by the people of Berar, such co-operation ought to be easier to obtain there than elsewhere.

4. *Fire protection—paragraphs 41 to 48 of the report.*—The results of fire protection in the Berar forests are extremely good, and form one of the most satisfactory features of the administration of the year. Nevertheless, it is matter for regret that the incendiaries, to whose action the fires in the Wun and Basim districts are attributed, have escaped punishment. Detection of such offences is always difficult, and depends greatly on the co-operation of the village officers and the relations that subsist between the forest officials and the people.

The case of Mr. Wittinbaker, to whose bad management the extent, if not the occurrence, of the fires in Buldana was due, has already received attention. For this and other misconduct his salary has been reduced from Rs. 150 to Rs. 100 a month, and the question of relegating him to a rangership has only been deferred pending the occurrence of a substantive vacancy in that grade.

5. *Artificial reproduction—paragraphs 52 to 58 of the report.*—The remarks made by the Conservator regarding artificial reproduction are interesting, and the Resident will be glad to see his suggestions tested by experiment.

6. *Communications—paragraphs 61 to 66 of the report.*—The construction of roads to open out the resources of the Melghat is an important subject. It

attracted the attention of the local authorities as far back as the year 1864; but the question was not seriously taken in hand till 1872, when proposals were submitted for the construction of a road from Ellichpur to Pili. This, it was urged, besides facilitating the exploitation of the productive Bairagarh reserves, would confer great benefits on the population of that tract by developing trade with the plains. The scheme received the approval of the Government of India in 1874, and was finally completed in the year 1881 at a cost of Rs. 3,25,502. It would be impossible, without unduly delaying this report, which is already overdue, to discuss the questions as to whether an inferior road would have brought in the same returns to the Forest Department, and whether the increase of general traffic, which is undoubtedly considerable, is sufficient, apart from forest considerations, to justify the construction of such a road; but that the income from the forest is more than sufficient to pay for the road will be seen from the following figures:—

Year.	Gross revenue.	Maintenance charges.	Net income.	Percentage on capital outlay of Rs. 3,25,502
	Rs.	Rs.	Rs.	
1887-88 ...	34,000	9,922	24,078	7·39
1888-89 ...	32,000	6,051	25,949	7·97

The Gugamal road, to which reference is also made in paragraph 64 of the report, was sanctioned by the Government of India in their letter No. 510-C of the 10th September 1885, and was designed to tap the central forests of the Melghat, which are far more valuable than those with which the Ellichpur-Pili road communicates. The expenditure up to the 31st March 1890 has been Rs. 3,09,594, and the total cost is estimated at Rs. 4,81,456, but it is too early as yet to hazard an opinion as to the ultimate success of the undertaking.

The cost of the Public Works Department's roads must obviously be much greater than those constructed and maintained by the Forest Department. The former have to be kept open throughout the year, and owing to the heavy traffic, other than in forest produce, are provided with bridges, and are made of greater width and with easier curves and gradients. Forest roads on the other hand are unmetalled and unbridged, and are only practicable after the monsoon, when the grass that has rendered them impassable during the rains is removed and the landslips and other damages repaired. They act, however, as valuable feeders to the main roads, and the Resident is glad to notice that 24 miles have been completed during the year at the apparently moderate cost of Rs. 10,801.

7. *Outturn—paragraph 74 of the report.*—The change made by the Conservator in the method of carrying out the improvement fellings in the Bairagarh and Gugamal reserves will doubtless very considerably increase the outturn of timber, and will also be a great convenience to consumers and exporters.

8. *Izaradars' claims—paragraph 78 of the report.*—With reference to the refusal of izaradars to pay grazing dues, the Resident hopes that at the approaching re-settlement such terms will be made with the izaradars as will put matters on a more satisfactory footing.

9. *Financial results—paragraph 83 of the report.*—The financial results of the year under review are the best on record for Berar. But a high surplus of forest revenue does not necessarily prove good or improved management; for it may be the result of exceptionally favourable natural or commercial conditions, or even of improvident or inactive administration. It is, therefore, always necessary to trace minutely the causes of every increase or decrease before coming to any conclusion as to whether it is matter for congratulation or the reverse. On the present occasion it is satisfactory to observe that in at least two instances, *viz.*, that of the improvement fellings in the Bairagarh reserve and that of the clearing of the excessively dense growth of babuls from some of the free grazing numbers of the Akola district, the increased revenue is due to improved management.

10. *New Forest Law.*—The Resident regrets to have to acknowledge that the responsibility for the delay in introducing the new Forest Law at present rests with himself, the papers having been with him now for 2½ months without his being able to find time for disposing of them. He hopes, however, to take them up immediately.

11. *Notice of officers.*—The Resident commends the good service done by Mr. Prevost and Mr. Mansukh Rai, and his special thanks are due to Mr. Dansey for his administration of the department throughout the year under report.

(By order.)

J. A. CRAWFORD,

Secretary for Berar.

No. 1048 F., dated Calcutta, the 20th December 1890.

From—SIR E. C. BUCK, Kt., *Secretary to the Government of India,*

To—*The Resident at Hyderabad.*

I AM directed to acknowledge the receipt of your letter No. 380, dated the 3rd ultimo, forwarding the Progress Report of Forest Administration in the Hyderabad Assigned Districts for the year 1889-90, with the remarks of the Commissioner and your Resolution thereon.

2. The Report was received on the 8th November, or more than two months after the date fixed for its submission. The Government of India attach special importance to the submission of the Report on the prescribed date, because it is desirable that the reviews of Forest Reports should be issued from Simla before the Inspector General of Forests proceeds on tour, and it is hoped that the orders passed by you on the subject will result in the Berar Forest Administration Report being punctually received by the Government of India in future years.

3. The area of Demarcated State Forests remained unchanged. District Reserved Forests were increased by 534 square miles transferred from Unreserved Forests, and the latter class gained, by re-computation of areas and by a balance of 6 square miles abandoned in excess of that taken up for cultivation, 163 square miles, as a set off against the 534 square miles lost by transfer.

Paragraphs 17 and 18 of the Report afford the further information on the subject of demarcation desired by the Government of India, and show that the boundaries of the different classes of forests have been properly marked off and are maintained in good order. In a separate communication to the Government of India, you have decided that the existing maps of the South Berar forests will suffice, and the survey of these forests will not, therefore, be necessary.

4. Although no Working-Plans were prepared during the year under review, steps were taken which, it is anticipated, will lead to the Melghat Reserves being brought under the provisions of a Working-Plan during the ensuing year. The collection of the necessary data with a view to the elaboration of more simple Plans for the South Berar Reserves have received attention in the manner indicated in paragraph 6 of the Government of India's review of the Report for 1888-89, and the systematic management of these forests will, it is stated, also be arranged for within the next year.

5. Appendices C and D to the Report show the sums annually expended on communications, buildings, &c., in the Ellichpur Division during the past sixteen years. These have been—

	Construction.	Repairs.
	R	R
Forest Department roads	92,700	21,763
Ditto buildings	13,268	12,147
Ditto wells, tanks, &c.	2,988	550
	1,08,956	34,460

	R
Total Forest Department .	1,43,416
Total Public Works Department .	6,37,366
GRAND TOTAL .	7,80,782

likely to lead to a further increase in outturn, as well as to prove a convenience to the people.

12. The financial results of the year compare with those of the preceding year as follows:—

Year.	Receipts.	Charges.	Surplus.	Proportion of Surplus to Gross Receipts. Per cent.
	R	R	R	
1889-90	4,40,541	1,76,150	2,64,391	60
1888-89	4,08,192	1,69,295	2,38,897	59
Increase in 1889-90	32,349	6,855	25,494	1

Both the gross revenue and the net surplus were the highest yet obtained in Berar, and the results are so far satisfactory.

Classified under the main heads, the receipts and charges of the past two years were:—

Year.	Departmental timber operations.	Other Revenue.			Formation & improvement of Forests.	Total		
		Receipts.	Charges.	Surplus.	Charges.	Receipts.	Charges.	Surplus.
	R	R	R	R	R	R	R	R
1889-90 . .	...	4,40,541	1,19,411	3,21,130	56,739	4,40,541	1,76,150	2,64,391
1888-89 . .	...	4,08,192	1,15,038	2,93,154	54,257	4,08,192	1,69,295	2,38,897
Increase in 1889-90	...	32,349	4,373	27,976	2,482	32,349	6,855	25,494

From the above statement it appears that only R56,739, or less than 13 per cent. of the gross receipts, were expended on developing the capital value of the forest estates. This percentage is considerably lower than that incurred in most Provinces under the Government of India, and indicates that further measures for the organisation and improvement of the forests (including primarily the execution of Working-Plans) are justified by the financial position.

13. The experimental date plantations at Ellichpur, two acres in extent, which are now reported to be doing well, might, in the opinion of the Government of India, be extended with advantage.

14. His Excellency the Governor General in Council desires to record his appreciation of the interest taken in Forest matters by both the Commissioner and yourself. The Government of India also notice with satisfaction that you are able to commend the good services of Mr. Prevost and Mr. Mansukh Rai, and that you consider the Conservator, Mr. Dansey, deserving of special thanks for his administration of the Department during the year under review.

No. 1049 F.

Copy, with copy of the Report, forwarded to the Foreign Department for information.

Government of India Central Printing Office.—No. 709 R. & A.—31-12-90—250.—G. R.